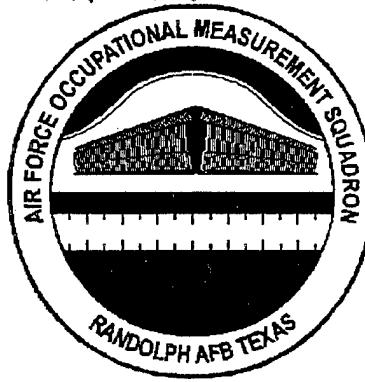DEFENSE TECHNICAL INFORMATION CENTER

# UNITED STATES AIR FORCE

# OCCUPATIONAL SURVEY REPORT

19980817 056

## AEROSPACE CONTROL AND WARNING SYSTEMS

### AFSC 1C5X1

### OSSN 2301

### JUNE 1998

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
1550 5TH STREET EAST
RANDOLPH AFB, TEXAS 78150-4449

# DISTRIBUTION FOR AFSC 1C5X1 OSR

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# PREFACE

This report presents the results of an Air Force Occupational Survey of the Aerospace Control and Warning Systems career ladder, Air Force Specialty Code (AFSC) 1C5X1. Authority for conducting occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the technical training location, all using major commands (MAJCOMs), and other interested operations and training officials.

The survey instrument was developed by Mr. Michael F. Brosnan, Inventory Development Specialist, with computer programming support from Mr. Tyrone Hill. Mr. Richard G. Ramos provided administrative support. First Lieutenant David A. Huber, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Chief, Airmen Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Additional copies of this report can be obtained by writing to AFOMS/OMYXI, 1550 5th Street East, Randolph AFB Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at http://www.omsq.af.mil.

GEORGE KAILIWAI III, Lt Col, USAF
Commander
Air Force Occupational Measurement Squadron

JOSEPH S. TARTELL
Chief, Occupational Analysis Flight
Air Force Occupational Measurement Squadron

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# SUMMARY OF RESULTS

1. **Survey Coverage**: Survey results are based on responses from 1,082 Aerospace Control and Warning Systems personnel. This represents 54 percent of the total assigned AFSC 1C5X1 population. Incumbents were surveyed across all the MAJCOMs. Active Duty and National Guard personnel are included in this survey. The sample includes personnel from the 3B-, 3C-, 5-, 5D-, 7-, 7D-, 9-, and 00-skill levels.

2. **Specialty Jobs**: In this survey, seven jobs and four clusters were identified. The Air Surveillance Cluster, Identification Job, Data Link Cluster, Battle Management Cluster, and Weapons Director Cluster are the core technical functions of this career ladder. Other technical functions include the Air Tasking Order (ATO) Automation Job, Mobility Job, Action Officer Job, and Radar Evaluation Job. There were also non-technical functions which included the Managerial and Training jobs.

3. **Career Ladder Progression**: Distinctions between skill level groups are evident, with personnel at the 3B-, 3C-, and 5-skill levels spending the vast majority of their time performing technical tasks across a number of different jobs. Members holding a 5D- or 7D-skill level are found performing technical work in the Weapons Director Cluster. At the 7-skill level, the shift towards supervisory tasks becomes clear. The 9/00-skill level positions are almost solely supervisory in nature.

4. **Training Analysis**: The AFSC 1C5X1 Specialty Training Standard (STS) document was well supported by survey data. There were a few STS elements requiring review by experienced subject-matter experts for possible deletion or revision.

5. **Job Satisfaction Analysis**: Group incumbents indicate moderate job satisfaction across the career ladder. Members of the Air Surveillance and Weapons Director clusters, in particular, show high job satisfaction. Job satisfaction ratings are generally lower than those of similar Mission Equipment Operations AFSCs, though they become consistent with these comparative groups at the 97+ month Total Active Federal Military Service level.

6. **Implications**: Survey data for AFSC 1C5X1 reflect a well-functioning career ladder. The career ladder structure is similar to that found in the previous occupational survey report (OSR); the career ladder has remained stable over time. Career ladder managers should review information contained in this OSR for possible use in future utilization and training decisions.

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# OCCUPATIONAL SURVEY REPORT (OSR)
## AEROSPACE CONTROL AND WARNING SYSTEMS CAREER LADDER
### (AFSC 1C5X1)

## INTRODUCTION

This report presents the results of an occupational survey of the Aerospace Control and Warning Systems career ladder completed by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron, in June 1998. This survey was conducted as part of a 5-year survey cycle. The previous survey was completed in 1994 and reported on both AFSCs 1C5X1 (enlisted) and 13B3 (officer).

### Background

According to AFMAN 36-2108 *Specialty Summary* for AFSC 1C5X1, effective 31 October 1997, Aerospace Control and Warning Systems personnel manage and operate aerospace control and warning systems, including functions involving electronic countermeasures and counter-countermeasures (ECCM), surveillance, data link management, identification, and weapons control. They provide radar control and monitoring of air weapons during offensive and defensive air operations. They make decisions in the conduct of air operations and in system equipment management. For entry into this specialty, normal color vision as defined in AFI 48-123 is required. Also, an ASVAB score of General 53 is required. Furthermore, for AFSC 1C5X1 the strength factor is "G," indicating a required weight lift of 40 lbs.

The current AFSC 1C5X1 technical schools are located at Keesler AFB MS and Tyndall AFB FL. The E3ABR1C531-003 Modular Control Equipment (MCE) Surveillance Operator course is taught at Keesler AFB MS. It is 6 weeks and 3 days long and includes instruction in fundamental subject areas common to aerospace control and warning operations, as well as familiarization and background relating to other positions which, when combined with unit on-the-job training (OJT), should enable graduates to rapidly adjust when assigned to other specific semi-automatic systems.

The Q-JSS-1C531 Apprentice Aerospace Control and Warning (AC&W) Operator, Joint Surveillance System (JSS) course is taught at Tyndall AFB FL. It is 3 weeks long and includes instruction in fundamental subject areas common to AC&W operations, such as the operation of the HMD22 console, which enables graduates to perform at an apprentice level in air surveillance operator positions in a JSS Region Operation Control Center or Sector Operation Control Center (SOCC).

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A third 3-skill level class, V3AZP1C531-001 North American Aerospace Defense (NORAD) and USSPACECOM Command Center Emergency Actions Controller is offered. This course is 3 weeks long and located at Falcon AFB CO. This course is for all personnel assigned to an Air Defense Operations Center or NBMC unit. It includes preparatory training in equipment operations, communications procedures, formatted message preparations and disseminations, and associated command and control functions and procedures required to perform duties as an emergency actions controller in the NORAD and USSPACECOM Command Center.

The W-JSS-1C551D Aerospace Control and Warning Weapons Director SOCC course is located at Tyndall AFB FL and is 19 weeks, 4 days long. The course provides instruction in subjects designed to qualify the graduate to solve the air mass problem, direct aircraft conducting air defense and tactical missions, coordinate aircraft control and warning activities, interact with other controlling agencies, understand the principles of radar and electronic countermeasures and electronic counter-countermeasures, and be familiar with the air defense organization of NORAD, the Tactical Air Control System (TACS), console familiarization and computer logic.

The W-MCE-1C551D Aerospace Control and Warning Weapons Director MCE course is located at Tyndall AFB FL and is 19 weeks, 4 days long. The course provides instruction in subjects designed to qualify the graduate to solve the air mass problem, direct aircraft conducting air defense and tactical missions, coordinate aircraft control and warning activities, interact with other controlling agencies, understand the principles of radar and electronic countermeasures and electronic counter-countermeasures, and be familiar with the air defense organization of NORAD and TACS. Also, the graduate will be familiar with employment of MCE operator interface equipment, Operator Console Unit familiarization and preparation, data base preparation, Voice Communications Access Unit preparation, and weapons control procedures.

The E3ACR1C571-000 Aerospace Control and Warning System Craftsman course is located at Keesler AFB MS and is 2 weeks long. It instructs DAFSC 1C571 members in the functional relationships within and among Aerospace Control and Warning System operations, electronic warfare systems, ground environmental systems, and electronic attack/electronic protection capabilities.

## SURVEY METHODOLOGY

### Inventory Development

Data for this survey were collected by administering USAF Job Inventory (JI) OSSN 2301, dated June 1997. During the initial inventory development, 48 subject-matter experts from 5 operational bases and 2 training units were interviewed. The developer reviewed pertinent career ladder documents, the previous inventory, and the previous OSR to prepare a task list. Bases visited during the development included:

| BASE | UNIT | REASON FOR VISIT |
|------|------|------------------|
| Keesler AFB MS | 335 TRS | Technical Training School |
| Hurlburt Field FL | 505 TSS | MCE and CTAPS testing |
| Eglin AFB FL | 728 ACS | Surveillance |
| Tyndall AFB FL | 81 TSS and 325 TRS | Range Control/Technical Training |
| Cheyenne Mountain Operations Center (CMOC) | CMOC | Air Defense information |
| Davis-Monthan AFB AZ | 612 COS | Air Operations Center |

The resulting JI lists 591 tasks, grouped into 13 duty categories. The inventory also contains a number of background questions relating to duty AFSC (DAFSC), time in present job, total active military service (TAFMS), work area assigned, job title, equipment used, and job satisfaction information.

## Survey Administration

From June 1997 through January 1998, the inventory disks were administered to personnel eligible for the survey. Base training offices located worldwide gave survey booklets to AFSC 1C5X1 personnel with DAFSCs of 1C531B, 1C531C, 1C551, 1C551D, 1C571, 1C571D, 1C591, and 1C500. The respondents were picked from a computer-generated mailing list from the Air Force Personnel Center. Personnel not considered eligible to take part in the survey were those in transition to a permanent change of station, those retiring at the time of the survey, those hospitalized, and those who had not been in their present job for a period of 6 weeks.

All eligible members who completed an inventory disk first completed an identification and background information section. Next, personnel went through the disk and checked all tasks performed on their present job. After checking the performed tasks, they then rated the tasks on a scale from 1 to 9 based on the relative amount of time they spent on that task compared to all others. A rating of 1 indicated a very small amount of time was spent and a rating of 9 indicated a large amount of time was spent on the task. To determine relative time spent on each task checked by a respondent, the sum of the ratings was assumed to account for 100 percent of his time on the job. All members' responses were added, then each rating was divided by the sum of all responses. Then, this quotient was multiplied by 100 to get the relative percent time spent for each task. This procedure allowed a comparison of percent members performing and relative percent time spent on tasks and groups of tasks.

## Survey Sample

The JI booklets mailed to participants in the survey were monitored to ensure the final survey sample would be representative of MAJCOM and paygrade groups. Table 1 lists the percentage distribution by MAJCOM of assigned personnel in the career ladder as of June 1997. Also shown

in Table 1 is the percentage distribution by MAJCOM of the final population. Table 2 shows the survey sample representation across paygrades. These tables reflect that the sample is a true representation of the career ladder population. The 1,082 respondents included in the survey are from 2 component groups (Active Duty and National Guard) and represent 54 percent of the total 1,997 AFSC 1C5X1 personnel assigned to the career ladder (as of June 1997).

## Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 1C5X1 personnel (generally E-6 or E-7 craftsmen) also completed a second disk for either Training Emphasis (TE) or Task Difficulty (TD). These disks were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail in the report.

**Training Emphasis**. TE is a rating of the amount of emphasis that should be placed on tasks in entry level training. The 49 senior AFSC 1C5X1 NCOs who completed disks were asked to select tasks they felt should be taught to entry-level personnel in some sort of structured training and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident technical schools, field training detachments, mobile training teams, OJT, or any other organized training method. In this survey, the average TE rating is 1.89 with a standard deviation of 1.48. As such, any rating of 3.37 or above is considered to have high training emphasis.

**Task Difficulty**. TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 41 senior NCOs who completed TD disks were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was high. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered difficult to learn.

TABLE 1

COMMAND REPRESENTATION OF AFSC 1C5X1 SURVEY SAMPLE

| COMMAND | PERCENT OF ASSIGNED* | PERCENT OF SAMPLE |
|---|---|---|
| ACC | 35 | 30 |
| AETC | 7 | 10 |
| LANTCOM | less than 1% | 1 |
| NORAD | 1 | 1 |
| PACAF | 13 | 16 |
| USAFE | 4 | 5 |
| ANG | 36 | 34 |
| ANG UNIT | less than 1% | 1 |
| OTHER | 2 | 2 |

TOTAL ASSIGNED-1,997
TOTAL NUMBER ELIGIBLE- 1,784
TOTAL IN SAMPLE- 1,082
PERCENT OF ASSIGNED- 54%
PERCENT OF ELIGIBLE- 61%

*As of June 1997

NOTE: AFSC 1C5X1 personnel not eligible for survey include those members with discharge, retirement, PCS, or hospital status, and those having less than 6 weeks in their present job

TABLE 2

PAYGRADE REPRESENTATION OF AFSC 1C5X1 SURVEY SAMPLE

| PAYGRADE | PERCENT OF ASSIGNED* | PERCENT OF SAMPLE |
|---|---|---|
| E-1 through E-3 | 12 | 11 |
| E-4 | 21 | 21 |
| E-5 | 32 | 35 |
| E-6 | 19 | 17 |
| E-7 | 12 | 12 |
| E-8 | 3 | 3 |
| E-9 | 1 | 1 |

*As of June 1997

TABLE 3

PERCENT TIME SPENT ON DUTY BY JOB*

| | ATO AUTOMATION JOB (N=6) | AIR SURVEILLANCE CLUSTER (N=377) | IDENTIFICATION JOB (N=65) | DATA LINK CLUSTER (N=82) | BATTLE MANAGEMENT CLUSTER (N=55) |
|---|---|---|---|---|---|
| A General Operations Activities | 46 | 39 | 36 | 43 | 40 |
| B Command and Control Activities | 28 | 8 | 6 | 6 | 19 |
| C Data Link Activities | - | 4 | 3 | 25 | - |
| D Data Quality Activities | 1 | 4 | 2 | 2 | - |
| E Identification or Surveillance Activities | 4 | 16 | 37 | 8 | 4 |
| F Range Control Activities | - | - | - | - | 1 |
| G Evaluating Radar Systems | - | 1 | 1 | - | - |
| H Weapons Director Activities | 1 | 4 | 3 | 1 | 2 |
| I Mobility and Contingency Activities | 4 | 6 | 1 | 3 | 2 |
| J Management and Supervisory Activities | 3 | 8 | 4 | 5 | 13 |
| K Training Activities | 4 | 5 | 4 | 2 | 5 |
| L General Administrative Activities | 6 | 3 | 3 | 3 | 10 |
| M General Supply Activities | 3 | 1 | 1 | 1 | 2 |

* Columns may not add to 100 percent due to rounding
- Indicates less than 1 percent

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## TABLE 3 (CONTINUED)

### PERCENT TIME SPENT ON DUTY BY JOB*

| | WEAPONS DIRECTOR CLUSTER (N=195) | MOBILITY JOB (N=5) | MANAGERIAL JOB (N=78) | ACTION OFFICER JOB (N=6) | RADAR EVALUATION JOB (N=12) | TRAINING JOB (N=11) |
|---|---|---|---|---|---|---|
| A  General Operations Activities | 31 | 22 | 13 | 11 | 19 | 18 |
| B  Command and Control Activities | 7 | 3 | 5 | 8 | 3 | 4 |
| C  Data Link Activities | 1 | - | 1 | 1 | - | 1 |
| D  Data Quality Activities | 1 | 3 | 1 | 2 | 8 | - |
| E  Identification or Surveillance Activities | 6 | 3 | 1 | 1 | 8 | 3 |
| F  Range Control Activities | 1 | - | - | 1 | - | - |
| G  Evaluating Radar Systems | - | 1 | - | 5 | 29 | - |
| H  Weapons Director Activities | 36 | 9 | 1 | 1 | 1 | 1 |
| I  Mobility and Contingency Activities | 2 | 32 | 7 | - | 1 | 4 |
| J  Management and Supervisory Activities | 8 | 14 | 53 | 31 | 16 | 13 |
| K  Training Activities | 5 | 3 | 8 | - | 9 | 52 |
| L  General Administrative Activities | 2 | 7 | 7 | 27 | 4 | 3 |
| M  General Supply Activities | 1 | 1 | 3 | 11 | 1 | 2 |

* Columns may not add to 100 percent due to rounding

- Indicates less than 1 percent

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TABLE 4

SELECTED BACKGROUND DATA FOR 1C5X1 CAREER LADDER JOBS

| | ATO AUTOMATION JOB (N=6) | AIR SURVEILLANCE CLUSTER (N=377) | IDENTIFICATION JOB (N=65) | DATA LINK CLUSTER (N=82) | BATTLE MANAGEMENT CLUSTER (N=55) |
|---|---|---|---|---|---|
| PERCENT OF TOTAL SAMPLE | less than 1 | 35 | 6 | 8 | 5 |
| PERCENT CONUS | 100 | 71 | 57 | 73 | 44 |
| **DAFSC DISTRIBUTION (AS A PERCENTAGE)** | | | | | |
| 1C531B | 0 | 4 | 10 | 16 | 0 |
| 1C531C | 67 | 7 | 4 | 7 | 4 |
| 1C551 | 33 | 51 | 71 | 59 | 40 |
| 1C551D | 0 | 3 | 0 | 0 | 0 |
| 1C571 | 0 | 29 | 14 | 18 | 49 |
| 1C571D | 0 | 1 | 0 | 0 | 0 |
| 1C591/00 | 0 | 4 | 2 | 0 | 7 |
| **COMPONENT STATUS** | | | | | |
| PERCENT ACTIVE DUTY | 100 | 51 | 34 | 65 | 76 |
| PERCENT NATIONAL GUARD | 0 | 49 | 66 | 35 | 24 |
| PREDOMINATE PAYGRADES | E-2 - E-4 | E-4 - E-7 | E-3 - E-6 | E-3 - E-6 | E-4 - E-7 |
| AVERAGE TICF (IN MONTHS)* | 26 | 109 | 72 | 90 | 127 |
| AVERAGE TAFMS (IN MONTHS)* | 27 | 115 | 77 | 98 | 142 |
| PERCENT IN FIRST ENLISTMENT* | 83 | 30 | 50 | 45 | 15 |
| AVERAGE NUMBER TASKS PERFORMED | 17 | 131 | 63 | 66 | 70 |
| PERCENT SUPERVISING | 17 | 46 | 28 | 32 | 51 |

* TICF, TAFMS, and first-enlistment data reflect Active Duty members only

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TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR 1C5X1 CAREER LADDER JOBS

| | WEAPONS DIRECTOR CLUSTER (N=195) | MOBILITY JOB (N=5) | MANAGERIAL JOB (N=78) | ACTION OFFICER JOB (N=6) | RADAR EVALUATION JOB (N=12) | TRAINING JOB (N=11) |
|---|---|---|---|---|---|---|
| PERCENT OF TOTAL SAMPLE | 18 | less than 1 | 7 | less than 1 | 1 | 1 |
| PERCENT CONUS | 58 | 40 | 72 | 83 | 100 | 64 |
| | | | | | | |
| DAFSC DISTRIBUTION (AS A PERCENTAGE) | | | | | | |
| 1C531B | 4 | 0 | 0 | 0 | 0 | 0 |
| 1C531C | 1 | 0 | 0 | 0 | 0 | 9 |
| 1C551 | 38 | 80 | 18 | 0 | 67 | 64 |
| 1C551D | 36 | 0 | 0 | 0 | 0 | 0 |
| 1C571 | 11 | 20 | 46 | 67 | 33 | 27 |
| 1C571D | 10 | 0 | 1 | 17 | 0 | 0 |
| 1C591/00 | 1 | 0 | 34 | 17 | 0 | 0 |
| | | | | | | |
| COMPONENT STATUS | | | | | | |
| ACTIVE DUTY | 79 | 100 | 83 | 83 | 100 | 91 |
| NATIONAL GUARD | 21 | 0 | 17 | 17 | 0 | 9 |
| | | | | | | |
| PREDOMINATE PAYGRADES | E-4 - E-5 | E-4 - E-6 | E-5 - E-9 | E-6 - E-7 | E-4 - E-6 | E-5 - E-6 |
| AVERAGE TICF (IN MONTHS)* | 109 | 139 | 201 | 201 | 126 | 106 |
| AVERAGE TAFMS (IN MONTHS)* | 125 | 156 | 217 | 192 | 136 | 125 |
| PERCENT IN FIRST ENLISTMENT | 11 | 0 | 2 | 0 | 8 | 30 |
| AVERAGE NUMBER TASKS PERFORMED | 137 | 96 | 103 | 46 | 80 | 58 |
| PERCENT SUPERVISING | 51 | 40 | 79 | 0 | 58 | 55 |

* TICF, TAFMS, and first-enlistment data reflect Active Duty members only

# SPECIALTY JOBS
## (Career Ladder Structure)

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by respondents. Comprehensive Occupational Data Analysis Programs assist by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on those tasks. A hierarchical clustering program compares all the individual job descriptions, locates those with the most similar tasks performed and time spent on tasks, and combines them to form a group in the clustering sequence. The computer program then finds all other individuals that are similar and adds them to the group. The program continues until all members of the survey are grouped. The result is a pattern of jobs that makes up the AFSC 1C5X1 career ladder.

The basic group used in the hierarchical clustering process is the **_Job_**. When two or more jobs have a substantial degree of similarity in tasks performed and time spent performing tasks, they are grouped together and identified as a **_Cluster_**. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

## Structure Overview

In this survey, seven jobs and four clusters were identified. These are listed and the descriptions of each are provided. The stage number (ST) or group number (GP) beside each job title is a computer-generated code number, and the letter N within parentheses corresponds to the number of personnel in each group.

I. AIR TASKING ORDER (ATO) AUTOMATION JOB (ST154, N=6)

II. AIR SURVEILLANCE CLUSTER (GP075, N=377)

    A. Base-Level Air Surveillance
    B. Senior-Level Air Surveillance
    C. Tracking
    D. Search Scope
    E. Electronic Protection

III. IDENTIFICATION JOB (ST147, N=65)

IV. DATA LINK CLUSTER (ST124, N=82)

    A. Data Link
    B. First-Line Supervisor

V.  BATTLE MANAGEMENT CLUSTER (ST083, N=55)

    A.  Battle Management Administration
    B.  Battle Management

VI.  WEAPONS DIRECTOR CLUSTER (ST133, N=195)

    A.  Weapons Director
    B.  First-Line Supervisor

VII.  MOBILITY JOB (ST125, N=5)

VIII.  MANAGERIAL JOB (ST122, N=78)

IX.  ACTION OFFICER JOB (ST145, N=6)

X.  RADAR EVALUATION JOB (ST197, N=12)

XI.  TRAINING JOB (ST276, N=11)

The AFSC 1C5X1 personnel forming these jobs and clusters account for 83 percent of the survey sample (see Figure 1).  The remaining 17 percent are listed as "not grouped."  These 190 personnel perform sets of tasks that differ from those tasks performed by the identified groups. Examples of job titles identified by these survey respondents include Defense Duty Technician, Facility Manager, Reconnaissance Mission Director, and Test Bed Manager.  Because of the differences in tasks performed, these personnel could not be grouped into any identifiable job.

Two tables in this section provide background information about the jobs and clusters mentioned.  Table 3 displays the relative amount of time spent across each of the eight duties for the identified groups. The data in Table 4 detail background information, such as DAFSC distributions across each group, average time in career field (TICF), average number of tasks performed, and the percentage of group members currently supervising others.  Also included in this report is an Appendix A, listing tasks performed by members in each of the job groups identified.

## Job Descriptions

I.  AIR TASKING ORDER (ATO) AUTOMATION JOB (ST154, N=6).  There are 6 persons making this job, accounting for less than 1 percent of the survey population.  These members are identified by their specialization in tasks relating to ATOs.  No other job group is found placing similar emphasis on ATO tasks.  Representative tasks that epitomize work performed by members of this job include:

build ATOs or ACOs
disseminate ATOs or ACOs
extract data from automated ATOs
download or upload automated ATOs
analyze or post air tasking orders (ATOs) or airspace control orders
   (ACOs)
interpret ATOs or ACOs
load ATOs


These 6 members perform only 17 tasks on average, nearly 3 times less than any other job group (see Table 4). The performance of such few tasks indicates this is a limited job. This group is the most junior of any identified as members average just over 2 years TAFMS. Five of the six members are in their first enlistment, and only one member currently supervises others. Four of the six members are located at Barksdale AFB LA, the others are located at Shaw AFB SC and Davis-Monthan AFB AZ.


   II.  AIR SURVEILLANCE CLUSTER (GP075, N=377). The Air Surveillance Cluster represents the core job of the career ladder. This cluster consists of 377 members, accounting for 35 percent of the survey population. This cluster is nearly twice as large as any other job or cluster identified. Members are found performing air surveillance tracking duties including determining target existence, tracking the identified target, and ensuring track continuity. Members spend 39 percent of their time performing tasks in Duty A, *General Operations Activities* (see Table 3). Representative tasks performed by members of this cluster include:


conduct shift change positional briefings
perform console or equipment setup or adjustment procedures
perform radio or telephone (RT) procedures
respond to alerts or warnings, such as defense conditions
   (DEFCONs) or weather alerts
perform console or equipment shutdown procedures
brief relieving crews on changes in policies, procedures, or
   operational status
interpret radar returns on displays


These 377 members perform 131 tasks on average, the second most of any group. Personnel average just short of 10 years TAFMS, with only 30 percent of all members in their first-enlistment. Members are largely in the paygrades of E-4 through E-7. Forty-nine percent of all members in this cluster are from the National Guard component. Forty-six percent of all members are currently supervising others.

Within this cluster there are five separate jobs. There are **Base-Level Air Surveillance** members who are found performing general operational activities, such as performing console or equipment setup or adjustment procedures, completing equipment performance checks, and interpreting radar returns or displays. These members perform 57 tasks on average. Personnel are largely in the paygrades of E-3 through E-6, and most members hold the 5-skill level.

There are also **Senior-Level Air Surveillance** members. These personnel are also found performing general operational activities, such as performing RT procedures, interpreting radar returns on displays, and performing console or equipment setup or adjustment procedures. However, these members are distinguished from other jobs within the Air Surveillance Cluster due to their senior status and high average number of tasks performed. These members are primarily in the paygrades of E-5 and E-6, and hold the 5- and 7-skill levels. They average 177 tasks performed, which indicates their increased responsibilities. These members, though still performing technical tasks, are exhibiting supervisory roles as 62 percent of all Senior-Level Air Surveillance members are supervising others.

A third job within this cluster consists of **Tracking** members. These Tracking members are clearly distinguished from other jobs within the cluster by their dual emphasis on both general operational activities and identification and surveillance activities. These members are found performing drop or extrapolation procedures, performing passive tracking, performing lost track procedures, and conducting shift change positional briefings. Group personnel perform 36 tasks on average. Personnel are predominately E-4s and E-5s, and the majority of members hold a 5-skill level.

Within this cluster there are also **Search Scope** members. These members are identified in the cluster by their performance of mobility tasks. Though these members still perform Air Surveillance tasks as their core job, they are differentiated from other Air Surveillance jobs through mobility functions. Tasks performed that distinguish these members from others in the cluster include erecting camouflage nettings, erecting tents, loading or offloading vehicles, and setting up or tearing down shelters. These members perform 69 tasks on average. They are largely in the paygrades of E-3 through E-5, and most members hold the 5-skill level. Twelve percent of all Search Scope members supervise others.

The final job within this cluster consists of **Electronic Protection (EP)** members. These members are unique from all others within the cluster due to their emphasis on EP tasks. These members avoid or reduce the effects of enemy attack through their relocation of electronic equipment and performance of anti-jamming techniques. Common tasks performed by these members include performing EP procedures, such as scope adjustments or voice procedures, analyzing or identifying jamming or interference, and performing height accuracy checks. These members perform 58 tasks on average. They are in the paygrades of E-3 through E-5 and hold the 3C- and 5-skill levels. No EP member supervises others.

III. IDENTIFICATION JOB (ST147, N=65). There are 65 members who make up the Identification Job, accounting for 6 percent of the survey population. These members are distinct from all others because of their concentration in Duty E, *Identification or Surveillance Activities*. Members spend 37 percent of their duty time performing tasks within this duty category, more than twice as much as any other job group (see Table 3). These personnel are found identifying a detected target, interpreting flight plan information, and maintaining track continuity. Representative tasks performed by members of the Identification Job include:

      identify aircraft using IFF/SIF procedures
      determine track classifications or identifications
      identify aircraft using methods other than IFF/SIF procedures
      correlate targets with known flight plans
      obtain identification information from other agencies
      perform radio or telephone (RT) procedures

Sixty-six percent of all members of this job are from the National Guard component. Members are largely in the paygrades of E-3 through E-6. They perform an average of 63 tasks. These personnel average a little more than 6 years TAFMS, of which the majority of that time has been spent in the career ladder. Only 28 percent of all members are supervising others (see Table 4).

IV. DATA LINK CLUSTER (ST124, N=82). There are 82 members who make up the Data Link Cluster, accounting for 8 percent of the survey sample. These members are identified by their specialization in Duty C, *Data Link Activities*. Members spend 25 percent of their time performing data link activities, over 6 times more than any other group (see Table 3). Group incumbents' core responsibilities are to exchange information with ground based and airborne stations. As such, representative tasks include:

      maintain data links
      monitor data link displays
      establish data links
      conduct shift change positional briefings
      identify data link malfunctions during digital link interface
      change radio frequencies on communications panels

Members of this cluster are largely in the paygrades of E-3 through E-6. These personnel average 8 years TAFMS, of which all but 8 months have been spent in the career ladder. Forty-five percent of these members are in their first enlistment. Fifty-nine percent of all members in this cluster hold a 5-skill level. Only 32 percent of all members supervise others (see Table 4).

Within this cluster there are two job groups. There are **Data Link** members whose job is technical in nature as they devote their time to data link and general operational tasks, such as monitoring data link displays, maintaining data links, and establishing data links. They are primarily in the paygrades of E-3 through E-5 and hold the 5-skill level. Only 24 percent of Data Link members supervise others.

There are also **First-Line Supervisors**. These members are still performing technical tasks indicative of the Data Link Cluster, such as interpreting radar returns on displays, conducting shift change positional briefings, and performing secure communications procedures. However, these members are also performing many supervisory tasks that the Data Link members are not, thereby identifying them as a separate job within the cluster. These tasks include conducting supervisory performance feedback sessions, writing performance reports or supervisory appraisals, and supervising military personnel. These members hold higher paygrades than the Data Link members as they are in the paygrades of E-5 through E-7. All members are found supervising others.

V. <u>BATTLE MANAGEMENT CLUSTER (ST083, N=55)</u>. *CDC 1C551 Aerospace Control and Warning Systems* describes battle management as "the provision of command and control of air operations by managing, disseminating, and assigning mission tasks defined in appropriate training orders." The 55 members of this cluster (who account for 5 percent of the survey population) conduct work that epitomizes the definition of battle management as they perform a mixture of both operational and command and control functions, including loading crypto variables, performing emergency action procedures, and receiving or recording intelligence information. Personnel spend 19 percent of their time performing tasks within duty B, *Command and Control Activities*, the second most time spent of any job group (see Table 3). Representative tasks performed by these members include:

> conduct shift change positional briefings
> brief relieving crews on changes in policies, procedures, or
>   operational status
> respond to alerts or warnings, such as defense conditions
>   (DEFCONs) or weather alerts
> perform authentication procedures
> perform secure communications procedures
> destroy classified materials

Members of this cluster largely hold paygrades of E-4 through E-7 and primarily hold 5- and 7-skill levels. They have an average of almost 14 years TAFMS, of which slightly over 12 years have been spent in the career ladder. Only 15 percent of these members are in their first enlistment, and 51 percent of all members are supervising others. Group members perform an average of 70 tasks (see Table 4).

Within this cluster there are two jobs. There are **Battle Management Administration** members who are found performing a mixture of battle management activities as well as general administrative activities, such as safeguarding and destroying classified materials. Performance of these general administrative activities identifies these members as a separate job within the cluster. These members hold paygrades of E-4 through E-7 and hold either a 5- or 7-skill level. They perform 32 tasks on average, and 57 percent of all members supervise others.

There are also **Battle Management** members. Common tasks performed by these members include briefing relieving crews on changes in policies, procedures, or operational status, performing RT procedures, and performing secure communications procedures. These members are largely in the paygrades of E-6 and E-7 and most hold the 7-skill level. They perform 77 tasks on average, and 70 percent supervise others.


   VI. WEAPONS DIRECTOR CLUSTER (ST133, N=195). The 195 members of the Weapons Director Cluster account for 18 percent of the survey population, the second largest group identified. These personnel perform tasks that ensure mission completeness, including accepting control of aircraft from other control agencies, deconflicting aircraft with respect to routes, altitudes, or headings, and performing aircraft-declared emergency procedures. These members are identified by their emphasis on tasks in Duty H, *Weapons Director Activities*. They spend 36 percent of their time performing tasks in this duty, greater than 4 times more than any other group (see Table 3). Representative tasks performed by these members include:


perform radio or telephone (RT) procedures
change radio frequencies on communications panels
perform console or equipment setup or adjustment procedures
determine aircraft positions during dissimilar or aerial combat tactics
 (DACT or ACT) exercises
study enemy tactics, formations, or aircraft and equipment capabilities
assist in conducting or conduct air refueling operations


Members of this cluster are primarily E-4s and E-5s holding either the 5- or 5D-skill level. These group incumbents average just over 10 years TAFMS, of which 9 have been spent in the career ladder. Eleven percent of all members are in their first enlistment. Members of this cluster perform an average of 137 tasks, more than any other identified group. High task performance indicates a wide scope of responsibility is associated with the job. Fifty-one percent of all members supervise others.

Within this cluster there are two jobs. There are **Weapons Director** members who concentrate on technical tasks associated with the job. These persons can be found performing RT procedures, determining aircraft positions during dissimilar or aerial combat tactics (DACT or

ACT) exercises, and coordinating handoffs with other agencies. These personnel are primarily in the paygrades of E-4 through E-6 and hold the 5- and 5D-skill level. They perform an average of 149 tasks. Fifty-one percent of these members supervise others.

There are also **First-Line Supervisors**. These members perform technical work common to the Weapons Director Cluster, but are differentiated due to their heavy emphasis on managerial tasks as well as those technical tasks. First-Line Supervisors are commonly found supervising military personnel, establishing performance standards for subordinates, and inspecting personnel for compliance with military standards. These members are generally higher in paygrade than the Weapons Director members as they are in the paygrades of E-5 through E-7. They hold either the 5- or 7-skill level and perform 108 tasks on average. As the job title implies, all First-Line Supervisors supervise others.

VII. <u>MOBILITY JOB (ST125, N=5)</u>. There are 5 members of the mobility job who account for less than 1 percent of the survey sample. These members are identified by their performance of mobility tasks. They spend 32 percent of their time performing tasks in Duty I, *Mobility and Contingency Activities*, nearly 5 times greater than any other job group (see Table 3). These personnel can be found developing personnel recall and accounting procedures, conducting mobility or contingency procedure orientations or briefings, and developing workcenter pyramid recall plans. Representative tasks performed by these members include:

    don or doff chemical warfare personal protective clothing
    request weather information
    interpret radar returns on displays
    coordinate specific source of personnel requirements with
      appropriate agencies
    participate in mobility exercise planning meetings
    maintain disaster preparedness checklists

These personnel are in the paygrades of E-4 through E-6 and most hold the 5-skill level. They average 13 years TAFMS, of which nearly 12 have been spent in the career ladder. None of the members of this job are in their first-enlistment. All members are from the Active Duty component. These personnel perform an average of 96 tasks, and 40 percent supervise others (see Table 4).

VIII. <u>MANAGERIAL JOB (ST122, N=78)</u>. As with most specialties, there are non-technical jobs performed by senior-level personnel. The 78 members of the Managerial Job spend 53 percent of their duty time performing tasks in Duty J, *Management and Supervisory Activities*, close to twice as much as any other job group (see Table 3). Managers are found performing such work as planning briefings, conferences, or workshops, conducting supervisory performance

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feedback sessions, and evaluating workload requirements. Members of this job are identified by their performance of many managerial tasks and few, if any, technical tasks. Representative tasks performed by members of this job include:

> supervise military personnel
> write recommendations for awards or decorations
> inspect personnel for compliance with military standards
> write performance reports or supervisory appraisals
> counsel subordinates concerning personal matters
> schedule work assignments or priorities

Managerial personnel are the most senior of any identified group. These members average 18 years TAFMS, with just under 17 of those being spent in the career ladder. Only 2 percent of all managers are in their first enlistment. They largely hold the 7- and 9/00-skill levels. These 78 personnel average 103 tasks and 79 percent are supervising others (see Table 4).

IX. ACTION OFFICER JOB (ST145, N=6). The 6 members of the Action Officer Job account for less than 1 percent of the survey population. These members are identified by their general administrative duties. Personnel focus their attention on tasks in Duty J (*Management and Supervisory Activities*, 31 percent time spent) and L (*General Administrative Activities*, 27 percent time spent), respectively (see Table 3). These personnel initiate requests for TDY orders, draft agenda for general meetings, and prepare administrative or classified materials for mailing, transporting, or issue. Representative tasks performed by members of this group include:

> compile data for records, reports, logs, or trend analyses
> write staff studies, surveys, or routine reports, other than training or
>  inspection reports
> plan briefings, conferences, or workshops
> coordinate requests for TDY orders with appropriate agencies
> annotate security forms for facilities or security containers
> initiate classified reports, messages, or documents

These members are found primarily at the headquarters (HQ) level, with members being assigned to HQ 1 AF, HQ USSPACECOM, HQ NORAD, and HQ AFOTEC. These members average 16 years TAFMS, second only to the Managerial Job. They are mostly in the paygrades of E-6 and E-7, and most hold the 7-skill level. These personnel perform only 46 tasks on average (second lowest of any group) and none supervise others, indicating the specialized nature of this job.

X. RADAR EVALUATION JOB (ST197, N=12). There are 12 members who make up the Radar Evaluation Job, accounting for 1 percent of the survey population. These members are identified by their focus on tasks in Duty G, *Evaluating Radar Systems*. Members spend 29 percent of their time performing tasks in this duty category, over 6 times more than any other group (see Table 3). These personnel upload evaluation data into computers, develop and justify radar evaluation computerized products, and monitor and evaluate equipment performance. Representative tasks performed by members of this job include:

> interpret effects of weather on radar
> analyze radar data to determine trends
> evaluate radar coverage
> conduct periodic radar evaluation programs (PREPs)
> determine standard deviations from acceptable search, beacon, and
>   height tolerances
> perform or assess data reductions

Nine of the 12 members are located at Hill AFB UT, the others are found at McChord AFB WA, Tyndall AFB FL, and Langley AFB VA. All members are in the Active Duty component. These members are mostly in the paygrades of E-4 through E-6 and hold either a 5- or 7-skill level. Members perform 80 tasks on average and 58 percent supervise others (see Table 4).

XI. TRAINING JOB (ST276, N=11). In almost all career fields there exists the need for a cadre of training personnel to provide quality entry-level classroom and hands-on training. These 11 members of the Training Job are found dedicating 52 percent of their time to tasks in Duty K, *Training Activities*, nearly 6 times more than any other group (see Table 3). Members can be found conducting training conferences, briefings, or debriefings, administering or scoring tests, and counseling trainees on training progress. Representative tasks performed by members of this job include:

> develop training programs, plans, or procedures
> develop training materials or aids
> evaluate personnel to determine training needs
> evaluate progress of trainees
> establish or maintain study reference files
> evaluate training materials or aids for operation or suitability

Members perform an average of 58 tasks during their duty time. They are primarily in the paygrades of E-5 and E-6 and the most hold a 5-skill level. These members average over 10 years TAFMS, of which nearly 9 were in the career ladder. Thirty percent of all members are in their first enlistment, and 55 percent supervise others.

## Comparison to Previous Study

The work performed by members of the 1998 survey sample was compared to that of the work performed by members in the 1994 survey sample. The jobs and functions of these members have remained stable compared to the last survey (see Table 5). Job structure has changed only slightly as nine core jobs identified in the current survey are consistent with core jobs identified in the previous survey. Though some jobs identified in the 1994 survey are not present in the 1998 survey, work performed by those members is still performed by jobs within clusters. For example, the 1994 survey identified a Tracking Job; members within the 1998 Air Surveillance Cluster are found performing similar tasks to those of the 1994 job. As such, the career ladder, as a whole, has changed little since the previous study. Two unique jobs, the ATO Automation and Mobility, were not identified in any previous survey. Furthermore, the Air Defense, Tracking, Search Scope Operator, ECCM, Standardization/Evaluation, and Range Control jobs were identified in previous surveys, but were not identified in the current survey.

# AFSC 1C5X1 SPECIALTY JOBS

Radar Evaluation Job 1%

Air Surveillance Cluster 35%

Not Grouped 17%

Identification Job 6%

Training Job 1%

Other* 2%

Data Link Cluster 8%

Weapons Director Cluster 18%

Battle Management Cluster 5%

Managerial Job 7%

* Other includes:
1. ATO Automation Job
2. Mobility Job
3. Action Officer Job

FIGURE 1

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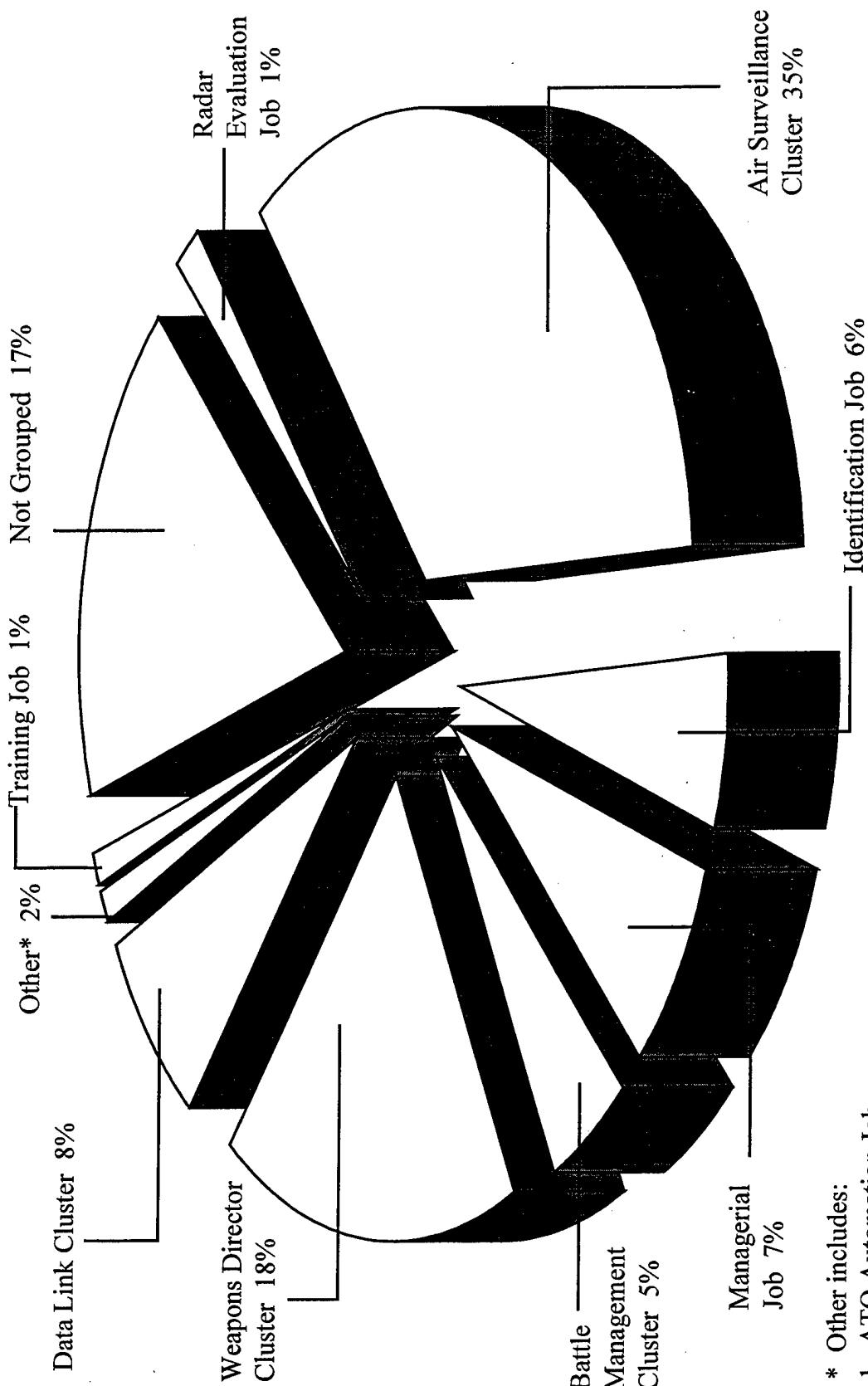
TABLE 5

COMPARISON OF CURRENT JOBS TO 1994 SURVEY JOBS

| 1998 JOBS | 1994 JOBS |
|---|---|
| Air Tasking Order (ATO) Automation | No similar job identified |
| Air Surveillance | Air Surveillance |
| Identification | Identification |
| Data Link | Interface Control |
| Battle Management | Battle Management |
| Weapons Director | Weapons Director |
| Mobility | No similar job identified |
| Managerial | Supervisory |
| Action Officer | Action Officer |
| Radar Evaluation | Radar Evaluation |
| Training | Training |
| No similar job identified | Air Defense |
| No similar job identified | Tracking |
| No similar job identified | Search Scope Operator |
| No similar job identified | Electronic Counter-Countermeasure (ECCM) |
| No similar job identified | Standardization/Evaluation |
| No similar job identified | Range Control |

# ANALYSIS OF CAREER LADDER PROGRESSION

An analysis of DAFSC groups, along with a study of the career ladder structure, is an integral aspect in analyzing each occupational survey. DAFSC analysis helps to identify both similarities and differences in task and duty performance at the skill levels. All this information may then be used to evaluate how well AFMAN 36-2108 *Specialty Descriptions* and the Specialty Training Standard (STS) reflect what is being accomplished in the career ladder.

The comparison of DAFSCs has been divided into an Active Duty and National Guard sample. The Active Duty group contains members holding 3B-, 3C-, 5-, 5D-, 7-, 7D-, and 9/00-skill levels (personnel holding either a 9- or 00-skill level were placed into one group because of the similarity of work performed). The National Guard sample contains members holding 5-, 7-, and 9/00-skill levels. In some instances, there were DAFSC groups with few members. Due to small representation, these DAFSC groups were omitted from analysis (for example, there was only one ANG DAFSC 1C551D member).

## Active Duty

**DAFSC 1C531B**. Representing 5 percent of the survey sample, these 53 members perform 52 tasks on average, the lowest of any DAFSC group. The majority of DAFSC 1C531B members (72 percent, cumulatively) are found in core technical jobs, which include the Air Surveillance Cluster, the Identification Job, the Data Link Cluster, and the Weapons Director Cluster (see Table 6). These members perform technical tasks as they dedicate 44 percent of their time performing general operational activities and another 19 percent of their time performing identification and surveillance activities (see Table 7). Common tasks performed by these members include performing RT procedures, performing drop or extrapolation procedures, performing console or equipment setup or adjustment procedures, and updating tracks (see Table 8). These 53 personnel average 1 1/2 years TAFMS, of which all but 1 month has been spent in the career ladder.

**DAFSC 1C531C**. There are 69 members who make up this DAFSC group, accounting for 6 percent of the survey sample. Similar to the DAFSC 1C531B members, these personnel perform mostly technical work. They, too, perform relatively few tasks on average (60), a trend indicative of entry-level personnel. The members are found largely in the Air Surveillance Cluster, with a handful of others found scattered in other technical jobs (see Table 6). These members spend 44 percent of their time performing general operational activities, as well as 12 percent of their time performing mobility and contingency activities, and 11 percent of their time performing identification or surveillance activities (see Table 7). Common tasks performed by these members include performing RT procedures, performing console or equipment shutdown procedures, and performing console or equipment setup or adjustment procedures (see Table 9). Members of this group average 1 year, 3 months TAFMS, of which all but 1 month has been spent in the career ladder.

**DAFSC 1C551**.  There are 319 members who make up the Active Duty DAFSC 1C551 group, accounting for 29 percent of the survey sample, the largest DAFSC group.  They perform an average of 82 tasks during their duty time.  Thirty percent of all members are found in the Air Surveillance Cluster, as well as another 15 percent in the Weapons Director Cluster (see Table 6). These members spend 37 percent of their time performing general operations activities and another 11 percent of their time performing management and supervisory activities (see Table 7), illustrating their preliminary transition to a managerial role.  However, these 5-skill level members' core responsibilities are still technical as they perform RT procedures, conduct shift change positional briefings, and perform console or equipment setup or adjustment procedures (see Table 10).  These personnel average nearly 10 years TAFMS, 9 of those having been spent in the career ladder.

**DAFSC 1C551D**.  There are 82 members in the Active Duty DAFSC 1C551D group, representing 8 percent of the survey sample. Eighty-five percent of these members are found in the Weapons Director Cluster, with others being found only in the Air Surveillance Cluster (see Table 6).  These personnel dedicate 40 percent of their time performing weapons director activities (see Table 7).  They perform 169 tasks on average, the most of any DAFSC group. Members of this group commonly perform RT procedures, transmit operational brevity codes, and determine aircraft positions during DACT or ACT exercises (see Table 11).  These members average 10 years TAFMS and 9 years TICF.

**DAFSC 1C571**.  The Active Duty DAFSC 1C571 group consists of 135 members and represents 12 percent of the survey sample.  They perform 114 tasks on average.  Though the majority of members are found performing technical work in the Air Surveillance and Battle Management clusters, members begin to see a transition into supervisory positions, as another 26 percent of members are found in the Managerial Cluster (see Table 6). These members show transition from technical work to supervisory as they spend 28 percent of their time on management and supervisory activities (see Table 7).  Progression is further illustrated by Table 12.  It can be seen that there is an increase in managerial tasks performed by 7-skill level members, as they are found participating in general meetings, such as staff meetings, briefings, conferences, or workshops, safeguarding classified materials, and supervising military personnel.  Table 13 illustrates the tasks which best differentiate Active Duty DAFSC 1C551 members from DAFSC 1C571 members. This table shows that fewer 7-skill level members are performing technical work, while many are performing supervisory tasks. They average nearly 17 years TAFMS and 15 years TICF.

**DAFSC 1C571D**  Twenty-three members make up the 7D-skill level group, accounting for 2 percent of the survey sample.  These members perform 159 tasks on average, second only to the 5D-skill level members.  Similar to the 5D-skill level members, these personnel are found largely in the Weapons Director Cluster (see Table 6).  They perform technical work as 34 percent of their time is spent performing weapons director activities and another 25 percent of their time is

spent performing general operational activities (see Table 7). These members perform such tasks as expanding, contracting, or offsetting radar video displays, establishing radio contact with aircrews, and determining aircraft positions during DACT or ACT exercises (see Table 14). Table 15 displays tasks that best differentiate Active Duty DAFSC 1C551D members from DAFSC 1C571D members. This table illustrates 7D-skill level members' increased supervisory responsibilities as few 7D-skill level members perform technical tasks while many perform supervisory tasks. These personnel average 14 1/2 years TAFMS, of which just over 13 have been spent in the career ladder.

**DAFSC 1C591/00**. There are 23 members who make up the Active Duty DAFSC 1C591/00 group, representing 2 percent of the survey sample. They perform 90 tasks on average. The majority of members are found in the Managerial Cluster, with others found only in the Air Surveillance Cluster (see Table 6). They spend 62 percent of their time performing management and supervisory activities (see Table 7). Work performed is supervisory in nature as they supervise military personnel, write recommendations for awards or decorations, plan briefings or workshops, and write job or position descriptions (see Table 16). Table 17 lists tasks that differentiate 7-skill level members from 9/00-skill level members. It can be seen that few 9/00-skill level members are performing technical tasks while many are performing supervisory tasks. Members of the 9/00-skill level group average just over 22 years TAFMS, having spent nearly 21 of those in the career ladder.

TABLE 6

DISTRIBUTION OF ACTIVE DUTY GROUP MEMBERS ACROSS
CAREER LADDER JOB GROUPS*
(PERCENT IN JOB)

| | | DAFSC 1C531B (N=53) | DAFSC 1C531C (N=69) | DAFSC 1C551 (N=319) | DAFSC 1C551D (N=82) | DAFSC 1C571 (N=135) | DAFSC 1C571D (N=23) | DAFSC 1C591/00 (N=23) |
|---|---|---|---|---|---|---|---|---|
| I | Air Tasking Order Automation | 0 | 6 | 1 | 0 | 0 | 0 | 0 |
| II | Air Surveillance | 26 | 39 | 30 | 13 | 27 | 9 | 4 |
| III | Identification | 11 | 3 | 4 | 0 | 1 | 0 | 0 |
| IV | Data Link | 22 | 7 | 9 | 0 | 4 | 0 | 0 |
| V | Battle Management | 0 | 3 | 7 | 0 | 13 | 0 | 0 |
| VI | Weapons Director | 13 | 3 | 15 | 85 | 6 | 82 | 0 |
| VII | Mobility | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| VIII | Managerial | 0 | 0 | 4 | 0 | 26 | 4 | 70 |
| IX | Action Officer | 0 | 0 | 0 | 0 | 2 | 4 | 4 |
| X | Radar Evaluation | 0 | 0 | 3 | 0 | 3 | 0 | 0 |
| XI | Training | 0 | 1 | 2 | 0 | 1 | 0 | 0 |
| XII | Not Grouped | 26 | 38 | 25 | 1 | 16 | 0 | 22 |

* Columns may not add to 100 percent due to rounding

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# TABLE 7

## AVERAGE TIME SPENT ON DUTIES BY ACTIVE DUTY DAFSC GROUPS*
### (PERCENT TIME SPENT)

| | DAFSC 1C531B (N=53) | DAFSC 1C531C (N=69) | DAFSC 1C551 (N=319) | DAFSC 1C551D (N=82) | DAFSC 1C571 (N=135) | DAFSC 1C571D (N=23) | DAFSC 1C591/00 (N=23) |
|---|---|---|---|---|---|---|---|
| A General Operations Activities | 44 | 44 | 37 | 28 | 26 | 25 | 9 |
| B Command and Control Activities | 6 | 6 | 7 | 6 | 10 | 4 | 4 |
| C Data Link Activities | 7 | 7 | 5 | less than 1% | 3 | 1 | 1 |
| D Data Quality Activities | 1 | 3 | 3 | 1 | 1 | 1 | 1 |
| E Identification or Surveillance Activities | 19 | 11 | 10 | 5 | 4 | 3 | 1 |
| F Range Control Activities | 2 | less than 1% | 1 | 1 | less than 1% | 1 | less than 1% |
| G Evaluating Radar Systems | 1 | less than 1% | 2 | 1 | 2 | 1 | less than 1% |
| H Weapons Director Activities | 12 | 4 | 8 | 40 | 3 | 34 | 2 |
| I Mobility and Contingency Activities | 1 | 12 | 4 | 4 | 4 | 1 | 8 |
| J Management and Supervisory Activities | 2 | 2 | 11 | 7 | 28 | 17 | 62 |
| K Training Activities | 3 | 6 | 7 | 5 | 8 | 7 | 4 |
| L General Administrative Activities | 3 | 4 | 5 | 2 | 7 | 5 | 7 |
| M General Supply Activities | 1 | 1 | 2 | 1 | 3 | less than 1% | 1 |

* Columns may not add to 100 percent due to rounding

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TABLE 8

REPRESENTATIVE TASKS PERFORMED BY DAFSC 1C531B PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=53) |
|---|---|---|
| A68 | Perform radio or telephone (RT) procedures | 81 |
| E218 | Perform drop or extrapolation procedures | 62 |
| A61 | Perform console or equipment setup or adjustment procedures | 62 |
| A85 | Update tracks | 62 |
| A1 | Accept assigned tracks | 60 |
| A2 | Accept simulated tracks | 57 |
| A16 | Conduct shift change positional briefings | 57 |
| E210 | Maintain track continuity | 55 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 55 |
| A62 | Perform console or equipment shutdown procedures | 51 |
| A76 | Report equipment malfunctions or substandard performance to appropriate agencies | 51 |
| A66 | Perform lost track procedures | 49 |
| A38 | Expand, contract, or offset radar video displays | 47 |
| A11 | Change radio frequencies on communications panels | 47 |
| E217 | Perform correlation checks | 47 |
| E219 | Perform passive tracking | 45 |
| E197 | Detect targets and initiate track symbology on present position of data | 43 |
| A37 | Evaluate track data | 43 |
| A45 | Interpret radar returns or displays | 43 |
| A84 | Update console displays | 43 |
| A70 | Perform secure communications procedures | 42 |
| A74 | Report airspace violations | 42 |
| A52 | Monitor air-to-ground or air-to-air communications | 40 |
| E213 | Monitor forward, lateral, or backtell operations | 38 |
| A79 | Request weather information | 34 |
| E203 | Identify aircraft using IFF/SIF procedures | 32 |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 30 |
| A53 | Monitor defense areas or zones | 26 |

# TABLE 9

## REPRESENTATIVE TASKS PERFORMED BY DAFSC 1C531C PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=69) |
|---|---|---|
| A68 | Perform radio or telephone (RT) procedures | 67 |
| A62 | Perform console or equipment shutdown procedures | 62 |
| A61 | Perform console or equipment setup or adjustment procedures | 61 |
| A16 | Conduct shift change positional briefings | 59 |
| A12 | Complete equipment performance checks | 57 |
| A11 | Change radio frequencies on communications panels | 57 |
| A40 | Extract data from automated ATOs | 54 |
| A44 | Interpret ATOs or ACOs | 54 |
| A70 | Perform secure communications procedures | 51 |
| A85 | Update tracks | 48 |
| A37 | Evaluate track data | 48 |
| A2 | Accept simulated tracks | 46 |
| E207 | Load ATOs | 46 |
| A9 | Analyze or post air tasking orders (ATOs) or airspace control orders (ACOs) | 46 |
| I392 | Erect tents | 45 |
| I391 | Erect camouflage nettings | 45 |
| A67 | Perform modular control equipment (MCE) computer initial program load procedures | 42 |
| A48 | Load crypto variables | 42 |
| L552 | Destroy classified materials | 42 |
| I404 | Load or offload vehicles | 42 |

TABLE 10

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1C551 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=319) |
|---|---|---|
| A68 | Perform radio or telephone (RT) procedures | 72 |
| A16 | Conduct shift change positional briefings | 72 |
| A61 | Perform console or equipment setup or adjustment procedures | 70 |
| A62 | Perform console or equipment shutdown procedures | 64 |
| A12 | Complete equipment performance checks | 64 |
| A11 | Change radio frequencies on communications panels | 64 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 59 |
| A38 | Expand, contract, or offset radar video displays | 56 |
| A76 | Report equipment malfunctions or substandard performance to appropriate agencies | 55 |
| A45 | Interpret radar returns or displays | 54 |
| A70 | Perform secure communications procedures | 52 |
| A18 | Configure console displays to depict operational information, such as coastlines, air bases, or training areas | 52 |
| A85 | Update tracks | 51 |
| A84 | Update console displays | 51 |
| L552 | Destroy classified materials | 51 |
| A37 | Evaluate track data | 50 |
| L574 | Safeguard classified materials | 48 |
| A41 | Identify computer malfunctions | 47 |
| A52 | Monitor air-to-ground or air-to-air communications | 47 |
| A6 | Analyze mission information on schedules, status boards, or displays | 43 |
| L561 | Inventory classified materials | 41 |
| A1 | Accept assigned tracks | 40 |
| E203 | Identify aircraft using IFF/SIF procedures | 38 |

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1C551D PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=82) |
|---|---|---|
| A68 | Perform radio or telephone (RT) procedures | 99 |
| A15 | Conduct radio checks with aircraft | 98 |
| H309 | Determine aircraft positions during dissimilar or aerial combat tactics (DACT or ACT) exercises | 96 |
| H366 | Transmit weapons safe checks to aircraft | 96 |
| A11 | Change radio frequencies on communications panels | 96 |
| A36 | Establish radio contact with aircrews | 94 |
| H362 | Transmit operational brevity codes | 93 |
| A61 | Perform console or equipment setup or adjustment procedures | 93 |
| H367 | Vector aircraft manually or by using computer-generated solutions | 93 |
| A38 | Expand, contract, or offset radar video displays | 93 |
| A45 | Interpret radar returns or displays | 91 |
| H308 | Deconflict aircraft with respect to routes, altitudes, or headings | 91 |
| H310 | Determine geometries | 91 |
| H302 | Commit fighter aircraft to targets | 91 |
| H364 | Transmit target information, such as bearings, ranges, altitudes, or navigational references | 90 |
| H357 | Transmit airspace information to aircraft | 90 |
| H300 | Assist in conducting or conduct tactical intercepts | 90 |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 90 |
| H341 | Monitor flying safety | 88 |
| H299 | Assist in conducting or conduct offensive or defensive missions | 88 |
| H290 | Accept control of aircraft from other control agencies | 88 |
| H311 | Determine relative heights between targets and interceptors | 87 |
| A52 | Monitor air-to-ground or air-to-air communications | 85 |

TABLE 12

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1C771 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=135) |
|---|---|---|
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 74 |
| J518 | Write recommendations for awards or decorations | 73 |
| J516 | Write performance reports or supervisory appraisals | 72 |
| A16 | Conduct shift change positional briefings | 71 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 71 |
| L574 | Safeguard classified materials | 69 |
| J449 | Conduct supervisory performance feedback sessions | 68 |
| J513 | Supervise military personnel | 67 |
| L552 | Destroy classified materials | 67 |
| J453 | Counsel subordinates concerning personal matters | 65 |
| A68 | Perform radio or telephone (RT) procedures | 64 |
| A70 | Perform secure communications procedures | 61 |
| A4 | Analyze impacts of equipment malfunctions | 61 |
| J451 | Conduct supervisory orientations for newly assigned personnel | 59 |
| A6 | Analyze mission information on schedules, status boards, or displays | 59 |
| J496 | Inspect personnel for compliance with military standards | 58 |
| J484 | Evaluate personnel for compliance with performance standards | 57 |
| J457 | Determine or establish work assignments or priorities | 57 |
| J474 | Establish performance standards for subordinates | 57 |
| A12 | Complete equipment performance checks | 56 |
| J462 | Develop or establish work methods or procedures | 56 |
| J501 | Plan briefings, conferences, or workshops | 55 |
| J497 | Interpret policies, directives, or procedures for subordinates | 53 |
| A48 | Load crypto variables | 53 |

TABLE 13

TASKS WHICH BEST DIFFERENTIATE ACTIVE DUTY
DAFSC 1C551 AND DAFSC 1C571 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | | DAFSC 1C551 (N=319) | DAFSC 1C571 (N=135) | DIFFERENCE |
|---|---|---|---|---|
| A85 | Update tracks | 51 | 20 | 31 |
| A1 | Accept assigned tracks | 40 | 20 | 20 |
| E210 | Maintain track continuity | 31 | 15 | 16 |
| E197 | Detect targets and initiate track symbology on present position of data | 28 | 12 | 16 |
| A66 | Perform lost track procedures | 32 | 16 | 16 |
| A2 | Accept simulated tracks | 38 | 22 | 16 |
| E217 | Perform correlation checks | 33 | 18 | 15 |
| E218 | Perform drop or extrapolation procedures | 32 | 18 | 14 |
| J518 | Write recommendations for awards or decorations | 27 | 73 | -46 |
| J451 | Conduct supervisory orientations for newly assigned personnel | 15 | 59 | -44 |
| J449 | Conduct supervisory performance feedback sessions | 27 | 68 | -41 |
| J516 | Write performance reports or supervisory appraisals | 31 | 72 | -41 |
| J501 | Plan briefings, conferences, or workshops | 17 | 55 | -38 |
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 36 | 74 | -38 |
| J457 | Determine or establish work assignments or priorities | 16 | 53 | -37 |
| J511 | Schedule work assignments or priorities | 16 | 53 | -37 |

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1C571D PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=23) |
|---|---|---|
| A38 | Expand, contract, or offset radar video displays | 91 |
| A36 | Establish radio contact with aircrews | 91 |
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences,or workshops, other than conducting | 87 |
| A68 | Perform radio or telephone (RT) procedures | 87 |
| H309 | Determine aircraft positions during dissimilar or aerial combat tactics (DACT or ACT) exercises | 87 |
| A52 | Monitor air-to-ground or air-to-air communications | 87 |
| H311 | Determine relative heights between targets and interceptors | 87 |
| A15 | Conduct radio checks with aircraft | 87 |
| A61 | Perform console or equipment setup or adjustment procedures | 87 |
| H315 | Direct aircraft to make IFF/SIF changes | 87 |
| H364 | Transmit target information, such as bearings, ranges, altitudes, or navigational references | 83 |
| H362 | Transmit operational brevity codes | 83 |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 83 |
| H326 | Evaluate adversary aircraft maneuvers during DACT or ACT exercises | 83 |
| H367 | Vector aircraft manually or by using computer-generated solutions | 83 |
| H290 | Accept control of aircraft from other control agencies | 83 |
| A45 | Interpret radar returns or displays | 83 |
| H341 | Monitor flying safety | 83 |
| H310 | Determine geometries | 83 |
| H317 | Direct aircraft flow to assigned targets, tankers, or airspace | 83 |
| H299 | Assist in conducting or conduct offensive or defensive missions | 83 |
| H297 | Assist in conducting or conduct aircrew mission prebriefings or debriefings | 78 |

TABLE 15

TASKS WHICH BEST DIFFERENTIATE ACTIVE DUTY
DAFSC 1C551D AND DAFSC 1C571D PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | | DAFSC 1C551D (N=82) | DAFSC 1C571D (N=23) | DIFFERENCE |
|---|---|---|---|---|
| B125 | Perform emergency action procedures | 55 | 22 | 33 |
| A59 | Perform authentication procedures | 83 | 52 | 31 |
| E202 | Evaluate radar coverage | 41 | 13 | 28 |
| H361 | Transmit mission support information, such as fuel or armament expenditures, to aircraft | 65 | 39 | 26 |
| H307 | Coordinate high-valued airborne asset (HVAA) flight safety or security actions | 68 | 43 | 25 |
| H353 | Relay tactical actions | 68 | 43 | 25 |
| A28 | Develop sector maps or charts | 28 | 4 | 24 |
| H318 | Direct buffer zone operations | 40 | 17 | 23 |
| J464 | Direct administrative functions | 11 | 52 | -41 |
| J463 | Develop or establish work schedules | 30 | 70 | -40 |
| J511 | Schedule work assignments or priorities | 22 | 61 | -39 |
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 51 | 87 | -36 |
| J487 | Evaluate work schedules | 26 | 61 | -35 |
| J488 | Evaluate workload requirements | 16 | 48 | -32 |
| J443 | Assign personnel to work areas or duty positions | 21 | 52 | -31 |
| J446 | Conduct general meetings, such as staff meetings, briefings, conferences, or workshops | 34 | 65 | -31 |

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# TABLE 16

## REPRESENTATIVE TASKS PERFORMED BY ACTIVE DUTY DAFSC 1C591/00 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=23) |
|---|---|---|
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 100 |
| J518 | Write recommendations for awards or decorations | 87 |
| J501 | Plan briefings, conferences, or workshops | 83 |
| J446 | Conduct general meetings, such as staff meetings, briefings, conferences, or workshops | 83 |
| J515 | Write job or position descriptions | 83 |
| J485 | Evaluate personnel for promotion, demotion, reclassification, or special awards | 78 |
| J516 | Write performance reports or supervisory appraisals | 78 |
| J496 | Inspect personnel for compliance with military standards | 78 |
| J480 | Evaluate job or position descriptions | 78 |
| J513 | Supervise military personnel | 74 |
| J484 | Evaluate personnel for compliance with performance standards | 74 |
| J508 | Review drafts of policy directives, instructions, or manuals | 70 |
| J453 | Counsel subordinates concerning personal matters | 70 |
| J451 | Conduct supervisory orientations for newly assigned personnel | 70 |
| J481 | Evaluate job-related suggestions | 70 |
| J509 | Schedule personnel for temporary duty (TDY) assignments, leaves, or passes | 70 |
| J511 | Schedule work assignments or priorities | 65 |
| J464 | Direct administrative functions | 65 |
| J488 | Evaluate workload requirements | 65 |
| J466 | Draft budget requirements | 65 |
| J457 | Determine or establish work assignments or priorities | 61 |
| J444 | Assign sponsors for newly assigned personnel | 61 |
| J477 | Evaluate budget requirements | 57 |
| J517 | Write staff studies, surveys, or routine reports, other than training or inspection reports | 52 |

TABLE 17

TASKS WHICH BEST DIFFERENTIATE ACTIVE DUTY
DAFSC 1C571 AND DAFSC 1C591/00 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | | DAFSC 1C571 (N=135) | DAFSC 1C591/00 (N=23) | DIFFERENCE |
|---|---|---|---|---|
| A61 | Perform console or equipment setup or adjustment procedures | 59 | 13 | 46 |
| K525 | Conduct OJT | 47 | 4 | 43 |
| A11 | Change radio frequencies on communications panels | 56 | 13 | 43 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 71 | 30 | 41 |
| A16 | Conduct shift change positional briefings | 71 | 30 | 41 |
| A18 | Configure console displays to depict operational information, such as coastlines, air bases, or training areas | 53 | 13 | 40 |
| A12 | Complete equipment performance checks | 56 | 17 | 39 |
| A13 | Conduct emergency evacuation procedures | 60 | 22 | 38 |
| J466 | Draft budget requirements | 13 | 65 | -52 |
| J477 | Evaluate budget requirements | 13 | 57 | -44 |
| J515 | Write job or position descriptions | 40 | 83 | -43 |
| J510 | Schedule staff assistance visits, inspections, or audits | 16 | 57 | -41 |
| J480 | Evaluate job or position descriptions | 38 | 78 | -40 |
| J458 | Develop organizational or functional charts | 30 | 70 | -40 |
| J467 | Draft agenda for general meetings, such as staff meetings, briefings, conferences, or workshops | 34 | 70 | -36 |
| L551 | Coordinate requests for TDY orders with appropriate agencies | 27 | 61 | -34 |

## National Guard

**DAFSC 1C551**. The 194 members of the National Guard DAFSC 1C551 group represent 18 percent of the survey population. These members average 85 tasks performed. Forty-nine percent of group members are found in the Air Surveillance Cluster (see Table 18). Work performed by National Guard 5-skill level members is technical, as personnel spend 42 percent of their duty time performing general operational activities (see Table 19), such as conducting shift change positional briefings, performing RT procedures, and updating tracks (see Table 20).

**DAFSC 1C571**. There are 130 members in the National Guard DAFSC 1C571 group, accounting for 12 percent of the survey population. They perform 115 tasks on average. These members perform technical work indicative of work performed by Air Surveillance personnel, as evidenced in Table 19, where it is seen that 37 percent of their duty time is devoted to general operational activities. They perform such tasks as responding to alerts or warnings, such as DEFCONs or weather alerts, conducting shift change positional briefings, and performing RT procedures (see Table 21). Table 22 lists tasks which best differentiate National Guard 5-skill level personnel from 7-skill level personnel. It can be seen that the 7-skill level members are more concentrated in managerial and supervisory tasks as they take on supervisory roles.

**DAFSC 1C591/00**. There are 35 members in the 9/00-skill level group, representing 3 percent of the survey population. These members perform 141 tasks on average, the highest of any National Guard skill level group. These members show a transition from technical roles to supervisory ones as 31 percent of all members are in the Managerial Job (see Table 18). The transition to managerial responsibilities is further illustrated by their emphasis on managerial duties as they spend 30 percent of their time performing management and supervisory tasks (see Table 19). Tasks performed by these group members include supervising military personnel, inspecting personnel for compliance with military standards, and writing recommendations for awards or decorations (see Table 23). Table 24 lists tasks that best differentiate National Guard 7-skill level members from 9/00-skill level members. This table shows that few 7-skill level members are performing specific supervisory tasks, while many 9/00-skill level members are performing those same tasks.

TABLE 18

DISTRIBUTION OF NATIONAL GUARD GROUP MEMBERS ACROSS
CAREER LADDER JOB GROUPS*
(PERCENT IN JOB)

|  |  | DAFSC 1C551 (N=194) | DAFSC 1C571 (N=130) | DAFSC 1C591 (N=35) |
|---|---|---|---|---|
| I | Air Tasking Order Automation | 0 | 0 | 0 |
| II | Air Surveillance | 49 | 57 | 40 |
| III | Identification | 18 | 6 | 3 |
| IV | Data Link | 10 | 7 | 0 |
| V | Battle Management | 0 | 7 | 11 |
| VI | Weapons Director | 13 | 10 | 3 |
| VII | Mobility | 0 | 0 | 0 |
| VIII | Managerial | 1 | 1 | 31 |
| IX | Action Officer | 0 | 1 | 0 |
| X | Radar Evaluation | 0 | 0 | 0 |
| XI | Training | 0 | 1 | 0 |
| XII | Not Grouped | 9 | 10 | 11 |

* Columns may not add to 100 percent due to rounding

TABLE 19

AVERAGE TIME SPENT ON DUTIES BY NATIONAL GUARD DAFSC GROUPS*
(PERCENT TIME SPENT)

|   |   | DAFSC 1C551 (N=194) | DAFSC 1C571 (N=130) | DAFSC 1C591/00 (N=35) |
|---|---|---|---|---|
| A | General Operations Activities | 42 | 37 | 25 |
| B | Command and Control Activities | 6 | 10 | 11 |
| C | Data Link Activities | 5 | 4 | 2 |
| D | Data Quality Activities | 3 | 3 | 2 |
| E | Identification or Surveillance Activities | 21 | 13 | 5 |
| F | Range Control Activities | less than 1% | less than 1% | less than 1% |
| G | Evaluating Radar Systems | 1 | 1 | 1 |
| H | Weapons Director Activities | 8 | 7 | 4 |
| I | Mobility and Contingency Activities | 3 | 4 | 7 |
| J | Management and Supervisory Activities | 4 | 10 | 30 |
| K | Training Activities | 3 | 5 | 6 |
| L | General Administrative Activities | 3 | 4 | 6 |
| M | General Supply Activities | 1 | 1 | 1 |

* Columns may not add to 100 percent due to rounding

TABLE 20

REPRESENTATIVE TASKS PERFORMED BY AIR NATIONAL GUARD
DAFSC 1C551 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=194) |
|---|---|---|
| A16 | Conduct shift change positional briefings | 87 |
| A68 | Perform radio or telephone (RT) procedures | 82 |
| A61 | Perform console or equipment setup or adjustment procedures | 79 |
| A85 | Update tracks | 75 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 74 |
| A1 | Accept assigned tracks | 72 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 69 |
| A66 | Perform lost track procedures | 68 |
| A70 | Perform secure communications procedures | 68 |
| A11 | Change radio frequencies on communications panels | 67 |
| A45 | Interpret radar returns or displays | 62 |
| A18 | Configure console displays to depict operational information, such as coastlines, air bases, or training areas | 62 |
| A82 | Switch console function modes | 62 |
| A2 | Accept simulated tracks | 62 |
| A38 | Expand, contract, or offset radar video displays | 61 |
| E197 | Detect targets and initiate track symbology on present position of data | 60 |
| E218 | Perform drop or extrapolation procedures | 60 |
| E210 | Maintain track continuity | 59 |
| A84 | Update console displays | 59 |
| A37 | Evaluate track data | 58 |
| A12 | Complete equipment performance checks | 58 |
| E203 | Identify aircraft using IFF/SIF procedures | 56 |
| E204 | Identify aircraft using methods other than IFF/SIF procedures | 52 |
| E231 | Report unknown aircraft | 52 |
| A53 | Monitor defense areas or zones | 47 |
| E199 | Determine track classifications or identifications | 44 |
| E198 | Determine flight sizes | 43 |

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY AIR NATIONAL GUARD
DAFSC 1C571 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=130) |
|---|---|---|
| A61 | Perform console or equipment setup or adjustment procedures | 87 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 87 |
| A16 | Conduct shift change positional briefings | 86 |
| A68 | Perform radio or telephone (RT) procedures | 85 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 81 |
| A70 | Perform secure communications procedures | 77 |
| A45 | Interpret radar returns or displays | 76 |
| A82 | Switch console function modes | 76 |
| A62 | Perform console or equipment shutdown procedures | 76 |
| A38 | Expand, contract, or offset radar video displays | 72 |
| A12 | Complete equipment performance checks | 72 |
| A59 | Perform authentication procedures | 72 |
| A76 | Report equipment malfunctions or substandard performance to appropriate agencies | 71 |
| A57 | Monitor or evaluate display console activities | 68 |
| A84 | Update console displays | 68 |
| A85 | Update tracks | 65 |
| A6 | Analyze mission information on schedules, status boards, or displays | 64 |
| A58 | Monitor or evaluate equipment performance | 63 |
| A37 | Evaluate track data | 61 |
| A53 | Monitor defense areas or zones | 55 |
| E203 | Identify aircraft using IFF/SIF procedures | 52 |
| L574 | Safeguard classified materials | 52 |
| J513 | Supervise military personnel | 48 |
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 44 |
| E210 | Maintain track continuity | 44 |
| E218 | Perform drop or extrapolation procedures | 43 |
| E219 | Perform passive tracking | 32 |

TABLE 22

TASKS WHICH BEST DIFFERENTIATE BETWEEN NATIONAL GUARD
DAFSC 1C551 AND DAFSC 1C571 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASK | | DAFSC 1C551 (N=194) | DAFSC 1C571 (N=130) | DIFFERENCE |
|---|---|---|---|---|
| A66 | Perform lost track procedures | 68 | 42 | 26 |
| E219 | Perform passive tracking | 53 | 32 | 21 |
| E197 | Detect targets and initiate track symbology on present position of data | 60 | 42 | 18 |
| E218 | Perform drop or extrapolation procedures | 60 | 43 | 17 |
| E210 | Maintain track continuity | 59 | 44 | 15 |
| A1 | Accept assigned tracks | 72 | 58 | 14 |
| A2 | Accept simulated tracks | 62 | 50 | 12 |
| E204 | Identify aircraft using methods other than IFF/SIF procedures | 52 | 40 | 12 |
| E199 | Determine track classifications or identifications | 44 | 33 | 11 |
| J513 | Supervise military personnel | 17 | 48 | -31 |
| A57 | Monitor or evaluate display console activities | 40 | 68 | -28 |
| J453 | Counsel subordinates concerning personal matters | 12 | 40 | -28 |
| J518 | Write recommendations for awards or decorations | 12 | 38 | -26 |
| J457 | Determine or establish work assignments or priorities | 14 | 39 | -25 |
| J443 | Assign personnel to work areas or duty positions | 16 | 41 | -25 |
| J484 | Evaluate personnel for compliance with performance standards | 11 | 35 | -24 |
| B105 | Coordinate equipment downtimes with maintenance personnel | 28 | 52 | -24 |
| B97 | Conduct mission or exercise crew briefings or crew debriefings | 29 | 53 | -24 |

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TABLE 23

REPRESENTATIVE TASKS PERFORMED BY AIR NATIONAL GUARD
DAFSC 1C591/00 PERSONNEL

| TASKS | | PERCENT MEMBERS PERFORMING (N=35) |
|---|---|---|
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 86 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 80 |
| J513 | Supervise military personnel | 77 |
| J496 | Inspect personnel for compliance with military standards | 77 |
| A16 | Conduct shift change positional briefings | 74 |
| J518 | Write recommendations for awards or decorations | 74 |
| J453 | Counsel subordinates concerning personal matters | 71 |
| J446 | Conduct general meetings, such as staff meetings, briefings, conferences, or workshops | 71 |
| J485 | Evaluate personnel for promotion, demotion, reclassification, or special awards | 69 |
| J511 | Schedule work assignments or priorities | 69 |
| J487 | Evaluate work schedules | 69 |
| J497 | Interpret policies, directives, or procedures for subordinates | 66 |
| J474 | Establish performance standards for subordinates | 66 |
| A14 | Conduct facility or site tours | 63 |
| J443 | Assign personnel to work areas or duty positions | 63 |
| L574 | Safeguard classified materials | 63 |
| J484 | Evaluate personnel for compliance with performance standards | 63 |
| J488 | Evaluate workload requirements | 63 |
| J457 | Determine or establish work assignments or priorities | 63 |
| L561 | Inventory classified materials | 60 |
| J501 | Plan briefings, conferences, or workshops | 57 |
| A45 | Interpret radar returns or displays | 54 |
| J464 | Direct administrative functions | 54 |
| B125 | Perform emergency action procedures | 51 |
| J471 | Establish administrative files, such as correspondence files or classified files | 49 |

## TABLE 24

### TASKS WHICH BEST DIFFERENTIATE BETWEEN NATIONAL GUARD DAFSC 1C571 AND DAFSC 1C591/00 PERSONNEL
### (PERCENT MEMBERS PERFORMING)

| TASK | | DAFSC 1C571 (N=130) | DAFSC 1C591/00 (N=35) | DIFFERENCE |
|---|---|---|---|---|
| A61 | Perform console or equipment setup or adjustment procedures | 87 | 57 | 30 |
| E218 | Perform drop or extrapolation procedures | 43 | 14 | 29 |
| A2 | Accept simulated tracks | 50 | 23 | 27 |
| A1 | Accept assigned tracks | 58 | 31 | 27 |
| A50 | Maintain equipment status records | 44 | 17 | 27 |
| E229 | Record tracks | 39 | 14 | 25 |
| A85 | Update tracks | 65 | 40 | 25 |
| A37 | Evaluate track data | 61 | 37 | 24 |
| A53 | Monitor defense areas or zones | 55 | 31 | 24 |
| D160 | Analyze or identify jamming or interference | 52 | 29 | 23 |
| A58 | Monitor or evaluate equipment performance | 63 | 40 | 23 |
| J496 | Inspect personnel for compliance with military standards | 32 | 77 | -45 |
| J474 | Establish performance standards for subordinates | 23 | 66 | -43 |
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 44 | 86 | -42 |
| J485 | Evaluate personnel for promotion, demotion, reclassification, or special awards | 28 | 69 | -41 |
| J446 | Conduct general meetings, such as staff meetings, briefings, conferences, or workshops | 32 | 71 | -39 |
| J501 | Plan briefings, conferences, or workshops | 18 | 57 | -39 |
| L562 | Maintain administrative files | 19 | 57 | -38 |

## Summary

The jobs performed by the Active Duty 3B-, 3C-, 5-, 5D-, and 7D-skill level members are almost solely technical. Most members of the 3B-, 3C-, 5-, and 7-skill level groups are found in the Air Surveillance Cluster, which epitomizes the core job of the career ladder. Members of the 5D- and 7D-skill level groups are found almost solely in the Weapons Director Cluster. Active Duty members move from the Air Surveillance Cluster to the Managerial Cluster as they attain the higher 7- and 9/00-skill levels.

National Guard members are more technical in nature than are Active Duty members. However, the National Guard sample is similar to the Active Duty sample as members take on managerial roles as they gain higher skill level rankings. Most of the National Guard 5- and 7-skill level members are in the Air Surveillance Cluster serving a technical role. Though numerous 9-skill level members are found in the Air Surveillance Cluster, they are performing managerial tasks indicative of a first-line supervisor.

## ANALYSIS OF MAJCOM GROUPS

In this survey, the various MAJCOMs were cross-referenced for differences in tasks performed by members or differences in equipment used and/or maintained to perform duties. The ATO Automation, Mobility, and Radar Evaluation jobs all consisted of Active Duty personnel. Equipment usage was relatively standard across MAJCOMs (though there were some MAJCOMs with higher percentages of personnel using certain equipment items, the differences between other MAJCOMs were insubstantial). There were also MAJCOM groups that performed slightly different or fewer tasks than other MAJCOM groups. For example, NORAD and ANG Unit members perform very few weapons director tasks, while all other MAJCOM members perform weapons director tasks with regularity. However, in general, differences in tasks performed by MAJCOM groups were small, indicating a homogeneous career ladder.

## TRAINING ANALYSIS

Occupational survey data can be an integral source of information used to modify training programs. Modification of these training programs can assist first-enlistment personnel in many ways (content easier to understand, more relevant, etc.). Factors that are useful in evaluating training can be jobs performed by first-enlistment personnel, distribution of first-enlistment personnel across the career ladder, percentages of first-enlistment personnel performing specific tasks, and TE and TD ratings provided by experienced personnel in the AFSC 1C5X1 career ladder (see **SURVEY METHODOLOGY**). To assist in the examination of the AFSC 1C5X1

STS, technical training personnel from Keesler AFB TX matched tasks from the AFSC JI to appropriate sections of the STS document. The following information reports on first-enlistment personnel who are on Active Duty status.

## First-Enlistment Personnel

There were 184 personnel in their first-enlistment (personnel considered to be in their first enlistment are Active Duty members who have 1-48 months TAFMS), 17 percent of the survey population. Thirty percent of all first-enlistment members are found in the Air Surveillance Cluster. First-enlistment members are also found in other core jobs, such as the Weapons Director Cluster, the Data Link Cluster, and the Identification Job (see Figure 2). Representative tasks performed by first-enlistment personnel include performing RT procedures, performing console or equipment setup or adjustment procedures, and conducting shift change positional briefings (see Table 25).

Examining equipment items used by first-enlistment members may also assist training personnel in paramount training decisions. In this study, there were only a small handful of equipment items that were used with regularity by first-enlistment personnel. For example, there was only 1 equipment item in which more than 50 percent of all first-enlistment members were using. This was a digital secure voice terminal, either a KY-65, KY-68, KY-99, or STU-III.

## Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD ratings, coupled with percentages of first-enlistment personnel performing tasks, serve as good tools when determining changes or adjustments in training. When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. TE and TD ratings reflect opinions from numerous AFSC 1C5X1 personnel who perform these tasks on a daily basis. As such, training personnel may examine these ratings to determine difficult tasks and provide more comprehensive training on them. For a more complete description of TE and TD ratings, see the Task Factor Administration section in **SURVEY METHODOLOGY**.

The tasks with the highest TE ratings were largely from Duty A, *General Operations Activities*, and Duty E, *Identification or Surveillance Activities*. Many of these tasks are performed by personnel found in the Air Surveillance Cluster and Identification Job, two core work areas of the career ladder. Examples of these tasks with high TE ratings include performing console or equipment setup or adjustment procedures, detecting targets and initiating track symbology on present position of data, and updating tracks. High percentages of first-enlistment personnel performing these tasks, coupled with these high TE ratings, suggest a need for these tasks to be taught in the entry-level classes. Training experts should review these TE ratings for training decision support. A more thorough listing of tasks rated high in TE can be found in Table 26.

The tasks with the highest TD ratings were largely from Duty G, *Evaluating Radar Systems*, Duty H, *Weapons Director Activities*, and Duty K, *Training Activities*. Examples of these tasks with high TD ratings include studying enemy tactics, formations, or aircraft and equipment capabilities, performing mathematical computations to determine radar performances or characteristics, and developing formal course curricula, Plans of Instruction, or STSs. A more thorough listing of tasks with high TD ratings can be found in Table 27.

To assist training personnel focus on tasks which are most appropriate for entry-level training, an additional factor, the Automated Training Indicator (ATI), was assigned to all 591 tasks in the inventory. A computer program considered percent first-enlistment members performing tasks, TE and TD ratings, and the Course Training Decision Table found in AETCI 36-2601 to determine the ATI. Numbered on an 18-point scale (with 1 being the lowest level of training indicated) an ATI reading of 8 or less leads to a training decision of OJT only. For example, if a task has low TE and TD ratings and a low percentage of first-enlistment members performing, then a low ATI is assigned to that task. Training personnel should focus on tasks with an ATI of 18, suggesting these tasks should be in the entry-level course. Table 28 lists tasks with the highest ATI ratings. Tasks with high ATI ratings are from numerous duty areas and many have high TE ratings. Because large percentages of first-enlistment personnel are performing these tasks and skilled TE raters have placed emphasis on these tasks, it is recommended that these be considered for training in the entry-level course.

## Specialty Training Standard (STS)

AETCI 36-2601 states that "tasks performed by 20 percent or more of any criterion group should be considered for inclusion in the STS." Normally, STS sections and subsections matched to tasks which have high TE and/or TD ratings and are performed by at least 20 percent of personnel in appropriate experience or skill-level groups (such as first-job, first-enlistment and 5- and 7-skill level groups) are considered to be supported and should be recognized for inclusion in the STS (see Table 29). Likewise, paragraphs having tasks with less than 20 percent members performing across all the criterion groups should be considered for deletion from the STS. Using this standard, only one paragraph of the STS went unsupported. This was paragraph 1.3, *Skill Level Duties of AFSCs 1C531/51/71*. However, this non-technical paragraph describes the duties of AFSC 1C5X1 members, and is paramount to the STS. As such, this paragraph should be retained in the STS. Training personnel should carefully review all areas of the STS to determine which areas, if any, are suitable for deletion.

# FIRST-ENLISTMENT SPECIALTY JOBS

Battle Management Cluster 3%

Air Surveillance Cluster 30%

Identification Job 6%

Not Grouped 31%

Other* 2%

Training Job 2%

Weapons Director Cluster 9%

ATO Automation Job 3%

Data Link Cluster 14%
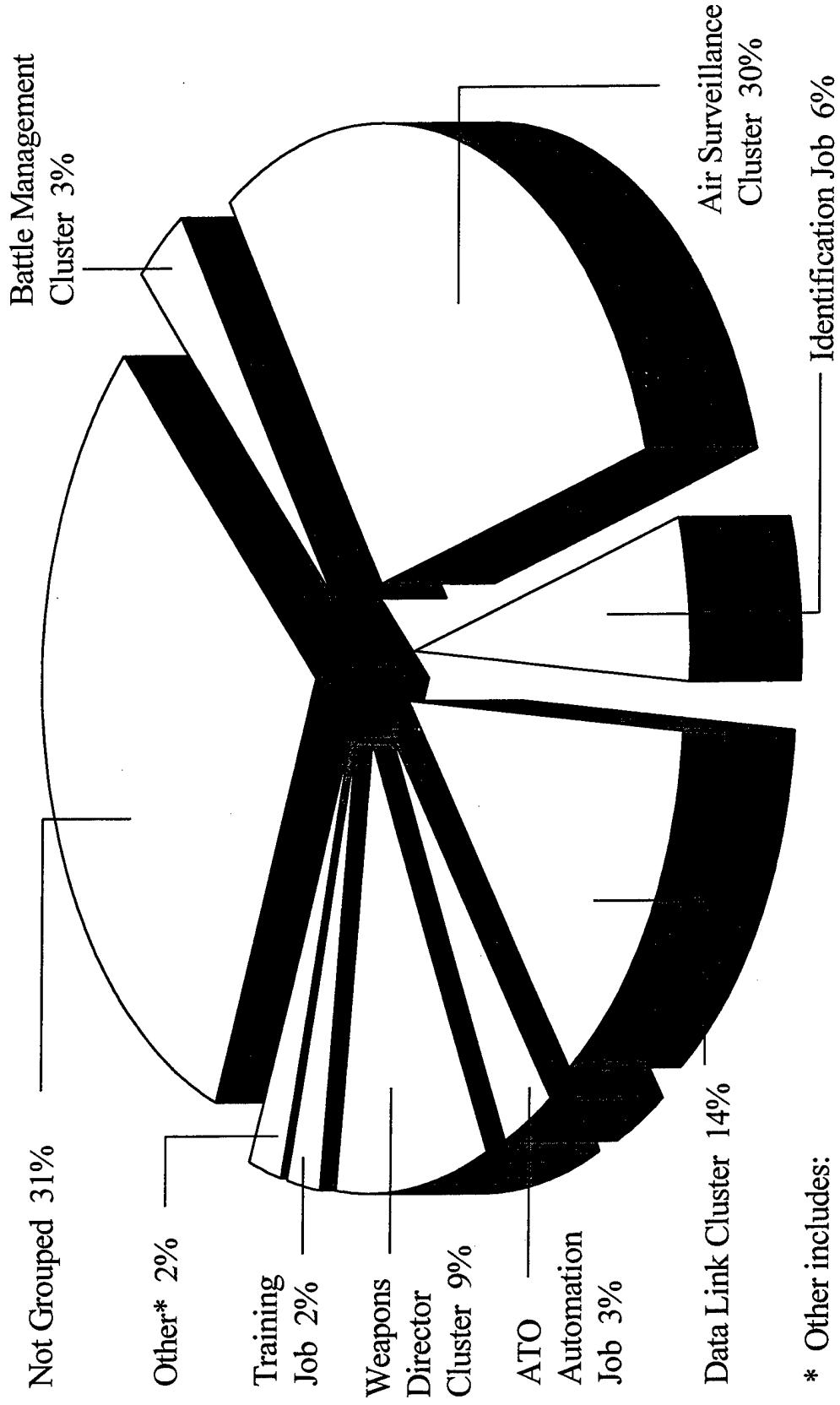
* Other includes:
1. Managerial Job
2. Radar Evaluation Job

FIGURE 2

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## TABLE 25

### REPRESENTATIVE TASKS PERFORMED BY
### FIRST-ENLISTMENT PERSONNEL*

| TASKS | | PERCENT MEMBERS PERFORMING (N=184) |
|---|---|---|
| A68 | Perform radio or telephone (RT) procedures | 71 |
| A61 | Perform console or equipment setup or adjustment procedures | 60 |
| A16 | Conduct shift change positional briefings | 60 |
| A62 | Perform console or equipment shutdown procedures | 56 |
| A85 | Update tracks | 54 |
| A11 | Change radio frequencies on communications panels | 54 |
| A2 | Accept simulated tracks | 50 |
| A1 | Accept assigned tracks | 50 |
| A37 | Evaluate track data | 48 |
| A12 | Complete equipment performance checks | 46 |
| A45 | Interpret radar returns on displays | 44 |
| A70 | Perform secure communications procedures | 44 |
| E210 | Maintain track continuity | 42 |
| A38 | Expand, contract, or offset radar video displays | 41 |
| A84 | Update console displays | 41 |
| A66 | Perform lost track procedures | 39 |
| A40 | Extract data from ATOs | 34 |
| E197 | Detect targets and initiate track symbology on present position of data | 33 |
| L574 | Safeguard classified materials | 32 |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 32 |
| E218 | Perform drop or extrapolation procedures | 30 |
| C154 | Maintain data links | 28 |

* First-enlistment data reflect Active Duty members only

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# TABLE 26

## TASKS RATED HIGHEST IN TRAINING EMPHASIS (TE)

| TASK | | TRAINING EMPHASIS* | PERCENT PERFORMING | | TASK DIFFICULTY† |
|---|---|---|---|---|---|
| | | | FIRST-JOB** (N=47) | FIRST-ENLISTMENT** (N=184) | |
| A61 | Perform console or equipment setup or adjustment procedures | 6.76 | 55 | 60 | 3.30 |
| E197 | Detect targets and initiate track symbology on present position of data | 6.47 | 36 | 34 | 3.46 |
| A85 | Update tracks | 6.33 | 47 | 54 | 2.88 |
| A45 | Interpret radar returns or displays | 6.27 | 38 | 44 | 4.00 |
| A62 | Perform console or equipment shutdown procedures | 6.24 | 53 | 57 | 3.11 |
| E210 | Maintain track continuity | 6.16 | 30 | 42 | 4.20 |
| A68 | Perform radio or telephone (RT) procedures | 6.02 | 55 | 71 | 2.97 |
| A12 | Complete equipment performance checks | 5.96 | 40 | 47 | 3.51 |
| E198 | Determine flight sizes | 5.86 | 26 | 22 | 3.46 |
| A1 | Accept assigned tracks | 5.84 | 34 | 51 | .50 |
| E203 | Identify aircraft using IFF/SIF procedures | 5.82 | 40 | 34 | 4.06 |
| A59 | Perform authentication procedures | 5.71 | 40 | 39 | 4.20 |
| E199 | Determine track classifications or identifications | 5.53 | 28 | 26 | 4.17 |
| E204 | Identify aircraft using methods other than IFF/SIF procedures | 5.51 | 30 | 32 | 4.74 |
| A37 | Evaluate track data | 5.47 | 43 | 48 | 4.15 |
| A2 | Accept simulated tracks | 5.45 | 49 | 50 | .57 |

\*   TE has an average of 1.89 and a standard deviation of 1.48 (high TE ratings are 3.37 and above)

\*\*  First-enlistment data reflect Active Duty members only

†   TD has an average of 5.00 and a standard deviation of 1.00 (high TD ratings are 6.00 and above)

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## TABLE 27

### TASKS RATED HIGHEST IN TASK DIFFICULTY (TD)

| TASK | | TASK DIFFICULTY* | PERCENT PERFORMING | | TRAINING EMPHASIS† |
| --- | --- | --- | --- | --- | --- |
| | | | FIRST-JOB** (N=47) | FIRST-ENLISTMENT** (N=184) | |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 7.51 | 38 | 32 | 2.06 |
| G282 | Perform mathematical computations to determine radar performances or characteristics | 7.34 | 6 | 3 | 1.08 |
| K529 | Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs) | 7.16 | 2 | 3 | .41 |
| H326 | Evaluate adversary aircraft maneuvers during DACT or ACT exercises | 7.07 | 2 | 4 | 1.14 |
| H314 | Direct aircraft in precise timing holding patterns to achieve critical timing positional parameters | 7.02 | 0 | 1 | .73 |
| G273 | Develop test plans for new radar systems | 6.96 | 0 | 1 | .49 |
| G274 | Develop and justify radar evaluation computerized products | 6.91 | 0 | 0 | .45 |
| I382 | Determine specific source of personnel requirements for deployment manning documents | 6.90 | 0 | 1 | .41 |
| H310 | Determine geometries | 6.87 | 2 | 4 | 1.08 |
| G275 | Establish radar evaluation or quality control (QC) programs, such as PREPs | 6.86 | 0 | 1 | .53 |
| G279 | Monitor evaluation flight patterns to interpret adverse environmental effects on aircraft cross-sections | 6.86 | 0 | 1 | 1.14 |
| K543 | Prepare job qualification standards (JQSs) | 6.83 | 0 | 3 | .61 |
| G284 | Perform or assess data reductions | 6.80 | 2 | 1 | 1.18 |

\* TD has an average of 5.00 and a standard deviation of 1.00 (high TD ratings are 6.00 and above)

** First-enlistment data reflect Active Duty members only

† TE has an average of 1.89 and a standard deviation of 1.48 (high TE ratings are 3.37 and above)

TABLE 28

TASKS RATED HIGHEST AUTOMATED TRAINING INDICATOR RATINGS

| TASKS | | TASK DIFFICULTY* | PERCENT PERFORMING FIRST ENLISTMENT** (N=184) | TRAINING EMPHASIS† | ATI‡ |
|---|---|---|---|---|---|
| L561 | Inventory classified materials | 4.40 | 24 | 3.80 | 18 |
| A42 | Insert operational data into computers | 4.42 | 30 | 5.04 | 18 |
| A59 | Perform authentication procedures | 4.20 | 39 | 5.71 | 18 |
| A44 | Interpret ATOs or ACOs | 5.58 | 35 | 3.49 | 18 |
| A37 | Evaluate track data | 4.15 | 48 | 5.47 | 18 |
| A6 | Analyze mission information on schedules, status boards, or displays | 4.11 | 32 | 4.31 | 18 |
| A41 | Identify computer malfunctions | 4.81 | 31 | 4.43 | 18 |
| L552 | Destroy classified materials | 4.50 | 35 | 4.41 | 18 |
| A45 | Interpret radar returns or displays | 4.00 | 44 | 6.27 | 18 |
| L574 | Safeguard classified materials | 4.81 | 32 | 4.96 | 18 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 4.27 | 52 | 5.43 | 18 |
| A70 | Perform secure communications procedures | 4.82 | 45 | 5.10 | 18 |
| A4 | Analyze impacts of equipment malfunctions | 5.31 | 20 | 3.29 | 17 |
| J513 | Supervise military personnel | 5.86 | 2 | .73 | 16 |

\*   TD has an average of 5.00 and a standard deviation of 1.00 (high TD ratings are 6.00 and above)

\*\*  First-enlistment data reflect Active Duty members only

†   TE has an average of 1.89 and a standard deviation of 1.48 (high TE ratings are 3.37 and above)

‡   ATI ratings are based on high percent members performing for first-enlistment members, high TE, and sufficient TD

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## TABLE 29

EXAMPLE TASKS WITH MORE THAN 20 PERCENT MEMBERS PERFORMING NOT
MATCHED TO STS ELEMENTS

| TASKS NOT REFERENCED | | FIRST JOB* (N=47) | FIRST ENLIST* (N=184) | DAFSC 1C531B&C (N=122) | DAFSC 1C551&D (N=401) | DAFSC 1C571&D (N=158) | TASK DIFF** |
|---|---|---|---|---|---|---|---|
| | | | | PERCENT MEMBERS PERFORMING | | | |
| I389 | Don or doff chemical warfare personal protective clothing | 30 | 32 | 21 | 29 | 24 | 3.15 |
| L574 | Safeguard classified materials | 60 | 66 | 29 | 49 | 70 | 4.81 |
| I397 | Identify chemical warfare agents | 17 | 17 | 15 | 17 | 17 | 6.03 |
| L552 | Destroy classified materials | 58 | 69 | 33 | 51 | 67 | 4.50 |
| I419 | Perform chemical warfare agent decontamination procedures | 13 | 16 | 15 | 13 | 14 | 5.88 |
| I438 | Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles | 21 | 23 | 23 | 21 | 18 | 4.26 |
| L561 | Inventory classified materials | 45 | 54 | 23 | 39 | 54 | 4.40 |
| I392 | Erect tents | 18 | 21 | 26 | 20 | 15 | 3.08 |
| I426 | Perform site security | 13 | 18 | 23 | 15 | 11 | 4.66 |
| I391 | Erect camouflage nettings | 19 | 22 | 26 | 20 | 15 | 3.35 |
| I424 | Perform personal camouflage procedures | 13 | 15 | 13 | 14 | 11 | 3.62 |
| I428 | Prepare equipment for deployments | 20 | 23 | 18 | 21 | 20 | 4.59 |
| I437 | Set up or tear down shelters | 17 | 20 | 20 | 18 | 15 | 4.45 |
| I420 | Perform disease or pestilence countermeasures | 4 | 4 | 1 | 2 | 5 | 6.11 |

\*   First-enlistment data reflect Active Duty members only

\*\*  TD has an average of 5.00 and a standard deviation of 1.00 (high TD ratings are 6.00 and above)

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# JOB SATISFACTION ANALYSIS

A critical tool in examining any career ladder's success is personal job satisfaction. Data from job satisfaction studies can be used by career ladder managers to gain a better understanding of what factors affect job performance. This OSR examined five job satisfaction variables: job interest, utilization of talents, utilization of training, sense of accomplishment, and reenlistment intentions.

Table 30 displays job satisfaction indicators for AFSC 1C5X1 TAFMS groups and a comparative sample group consisting of similar AFSC personnel interviewed in 1997. Data indicate first-enlistment personnel in the AFSC 1C5X1 career ladder are discontent with their current jobs. All job satisfaction ratings are lower for the AFSC 1C5X1 first-enlistment members than are those for the comparative sample first-enlistment members. The AFSC 1C5X1 49-96 month TAFMS group members' job satisfaction ratings were closer to those of the comparative sample; however, they were still consistently lower. Only the 97+ month TAFMS group had higher job satisfaction ratings than those of the comparative sample group.

Table 31 compares job satisfaction among the jobs and clusters. The data are useful in examining the career ladder for any deficiencies in training or job placement. By locating these deficiencies, if any, career ladder experts can make necessary adjustments to training or job placement. Members of the Air Surveillance and Weapons Director clusters, the two largest groups of the survey sample, expressed relatively high job satisfaction, particularly in perceived utilization of training. However, other core job groups expressed low job satisfaction. Members from the Data Link and Battle Management clusters expressed low job interest and sense of accomplishment. Low job satisfaction by these clusters is further reflected in reenlistment intentions, where only 58 percent of all Air Surveillance Cluster members and 49 percent of all Data Link Cluster members plan to reenlist.

Table 32 compares job satisfaction among the Active Duty and National Guard samples. The National Guard members expressed much higher job satisfaction in all response categories, particularly in perceived utilization of talents and perceived utilization of training. Reenlistment intentions were moderate for those not retiring at the end of their current enlistment. These data indicate members from both component groups perceive they are generally well trained and are relatively satisfied with their current duties.

TABLE 30

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 1C5X1 AND
COMPARATIVE SAMPLE GROUP*†
(PERCENT MEMBERS RESPONDING)

| | 1-48 MONTHS TAFMS | | 49-96 MONTHS TAFMS | | 97+ MONTHS TAFMS | |
|---|---|---|---|---|---|---|
| | 1998 (N=184) | COMP SAMPLE (N=269) | 1998 (N=105) | COMP SAMPLE (N=242) | 1998 (N=430) | COMP SAMPLE (N=585) |
| EXPRESSED JOB INTEREST: | | | | | | |
| INTERESTING | 39 | 64 | 49 | 54 | 69 | 72 |
| SO-SO | 25 | 17 | 22 | 25 | 15 | 13 |
| DULL | 36 | 19 | 30 | 21 | 16 | 15 |
| PERCEIVED UTILIZATION OF TALENTS: | | | | | | |
| FAIRLY WELL TO PERFECTLY | 42 | 69 | 60 | 60 | 77 | 74 |
| LITTLE OR NOT AT ALL | 58 | 31 | 40 | 40 | 23 | 26 |
| PERCEIVED UTILIZATION OF TRAINING: | | | | | | |
| FAIRLY WELL TO PERFECTLY | 74 | 90 | 72 | 80 | 78 | 74 |
| LITTLE OR NOT AT ALL | 26 | 10 | 28 | 20 | 22 | 24 |
| SENSE OF ACCOMPLISHMENT: | | | | | | |
| SATISFIED | 38 | 65 | 46 | 54 | 64 | 64 |
| NEUTRAL | 21 | 16 | 14 | 13 | 10 | 10 |
| DISSATISFIED | 41 | 19 | 40 | 33 | 25 | 26 |
| REENLISTMENT INTENTIONS: | | | | | | |
| YES, OR PROBABLY YES | 42 | 47 | 48 | 56 | 70 | 68 |
| NO, OR PROBABLY NO | 58 | 52 | 52 | 44 | 10 | 11 |
| PLAN TO RETIRE | 0 | 0 | 0 | 0 | 20 | 21 |

* Comparative sample consists of similar Mission Equipment Operations AFSCs (e.g., Space Systems Operations and Tactical Air Command and Control)
† Job satisfaction columns may not add to 100 percent due to rounding

# TABLE 31

## COMPARISON OF JOB SATISFACTION DATA FOR CLUSTERS AND JOB TYPES
### (PERCENT MEMBERS RESPONDING)

| | ATO AUTOMATION JOB (N=6) | AIR SURVEILLANCE CLUSTER (N=377) | IDENTIFI-CATION JOB (N=65) | DATA LINK CLUSTER (N=82) | BATTLE MANAGEMENT CLUSTER (N=55) | WEAPONS DIRECTOR CLUSTER (N=195) |
|---|---|---|---|---|---|---|
| **EXPRESSED JOB INTEREST:** | | | | | | |
| INTERESTING | 67 | 69 | 74 | 55 | 49 | 72 |
| SO-SO | 17 | 16 | 17 | 12 | 31 | 16 |
| DULL | 17 | 15 | 9 | 33 | 18 | 11 |
| **PERCEIVED UTILIZATION OF TALENTS:** | | | | | | |
| FAIRLY WELL TO PERFECTLY | 67 | 76 | 71 | 62 | 62 | 78 |
| LITTLE OR NOT AT ALL | 33 | 24 | 29 | 38 | 38 | 22 |
| **PERCEIVED UTILIZATION OF TRAINING:** | | | | | | |
| FAIRLY WELL TO PERFECTLY | 33 | 90 | 89 | 80 | 67 | 91 |
| LITTLE OR NOT AT ALL | 67 | 10 | 11 | 20 | 33 | 9 |
| **SENSE OF ACCOMPLISHMENT:** | | | | | | |
| SATISFIED | 67 | 63 | 60 | 54 | 53 | 71 |
| NEUTRAL | 17 | 14 | 15 | 12 | 16 | 9 |
| DISSATISFIED | 17 | 23 | 25 | 34 | 29 | 21 |
| **REENLISTMENT INTENTIONS\*:** | | | | | | |
| YES, OR PROBABLY YES | 83 | 58 | 68 | 49 | 71 | 69 |
| NO, OR PROBABLY NO | 17 | 32 | 27 | 36 | 12 | 24 |
| PLAN TO RETIRE | 0 | 10 | 5 | 15 | 14 | 7 |

* Reenlistment intentions reflect Active Duty personnel only

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## TABLE 31 (CONTINUED)

### COMPARISON OF JOB SATISFACTION DATA FOR CLUSTERS AND JOB TYPES
### (PERCENT MEMBERS RESPONDING)

| | MOBILITY JOB (N=5) | MANAGERIAL JOB (N=78) | ACTION OFFICER JOB (N=6) | RADAR EVALUATION JOB (N=12) | TRAINING JOB (N=11) |
|---|---|---|---|---|---|
| **EXPRESSED JOB INTEREST:** | | | | | |
| INTERESTING | 100 | 83 | 100 | 83 | 82 |
| SO-SO | 0 | 8 | 0 | 8 | 0 |
| DULL | 0 | 9 | 0 | 8 | 18 |
| **PERCEIVED UTILIZATION OF TALENTS:** | | | | | |
| FAIRLY WELL TO PERFECTLY | 100 | 82 | 84 | 92 | 91 |
| LITTLE OR NOT AT ALL | 0 | 18 | 17 | 8 | 9 |
| **PERCEIVED UTILIZATION OF TRAINING:** | | | | | |
| FAIRLY WELL TO PERFECTLY | 100 | 67 | 50 | 75 | 73 |
| LITTLE OR NOT AT ALL | 0 | 33 | 50 | 25 | 27 |
| **SENSE OF ACCOMPLISHMENT:** | | | | | |
| SATISFIED | 100 | 71 | 100 | 75 | 73 |
| NEUTRAL | 0 | 8 | 0 | 17 | 18 |
| DISSATISFIED | 0 | 22 | 0 | 8 | 9 |
| **REENLISTMENT INTENTIONS*:** | | | | | |
| YES, OR PROBABLY YES | 60 | 55 | 40 | 67 | 80 |
| NO, OR PROBABLY NO | 20 | 5 | 20 | 17 | 10 |
| PLAN TO RETIRE | 20 | 40 | 40 | 17 | 10 |

* Reenlistment intentions reflect Active Duty personnel only

TABLE 32

COMPARISON OF JOB SATISFACTION DATA FOR AFSC 1C5X1
ACTIVE DUTY, NATIONAL GUARD, AND RESERVE GROUPS
(PERCENT MEMBERS RESPONDING)

| | ACTIVE DUTY (N=719) | NATIONAL GUARD (N=363) |
|---|---|---|
| EXPRESSED JOB INTEREST: | | |
| INTERESTING | 58 | 83 |
| SO-SO | 19 | 10 |
| DULL | 23 | 6 |
| PERCEIVED UTILIZATION OF TALENTS: | | |
| FAIRLY WELL TO PERFECTLY | 65 | 85 |
| LITTLE OR NOT AT ALL | 35 | 15 |
| PERCEIVED UTILIZATION OF TRAINING: | | |
| FAIRLY WELL TO PERFECTLY | 76 | 94 |
| LITTLE OR NOT AT ALL | 24 | 6 |
| SENSE OF ACCOMPLISHMENT: | | |
| SATISFIED | 55 | 77 |
| NEUTRAL | 13 | 10 |
| DISSATISFIED | 31 | 13 |
| REENLISTMENT INTENTIONS: | | |
| YES, OR PROBABLY YES | 60 | 77 |
| NO, OR PROBABLY NO | 28 | 12 |
| PLAN TO RETIRE | 12 | 11 |

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# IMPLICATIONS

In terms of tasks performed and relative time spent on duties, the Aerospace Control and Warning Systems structure appears to have changed very little since the previous study conducted in 1994 (see Table 5), as core jobs remain similar. DAFSC 1C531B, 1C531C, and 1C551 members are performing technical tasks in their duty time as they are found in the Air Surveillance Cluster, Identification Job, Data Link Cluster, and Battle Management Cluster. DAFSC 1C551D and 1C571D members also perform technical work in the Weapons Director Cluster. Members advancing to the 7-skill level begin to take on supervisory roles. Though members are still found in the Air Surveillance Cluster as well as the Battle Management Cluster, they are performing the work of a first-line supervisor and are also making the transition to the Managerial Job. The 9/ 00-skill level personnel are managerial in nature and spend their time performing supervisory activities.

Analysis of the AFSC 1C5X1 STS reflected support for all but one element with matched tasks. Those tasks with high percent members performing not matched to STS elements had only moderate attached TD ratings, further illustrating a well-supported STS document. The STS document should be thoroughly examined to determine if elements should be retained, deleted, or revised in the next Career Field Education and Training Plan (CFETP). Some training elements may be critical to retain due to certain safety or mission essential functions though performance indicators are low. The tasks with high percentages of members performing should be examined for inclusion into the CFETP document.

The personnel of the AFSC 1C5X1 career ladder expressed moderate job satisfaction. Reenlistment intentions were moderate throughout most job and component groups. This indicates members feel they are generally well trained and their skills are properly applied to their jobs.

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APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY
MEMBERS OF CAREER LADDER JOBS

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# TABLE A1

## REPRESENTATIVE TASKS PERFORMED BY ATO AUTOMATION JOB

| TASKS | | PERCENT MEMBERS PERFORMING (N=6) |
|---|---|---|
| B89 | Build ATOs or ACOs | 100 |
| B117 | Disseminate ATOs or ACOs | 100 |
| A40 | Extract data from automated ATOs | 83 |
| A32 | Download or upload automated ATOs | 83 |
| A9 | Analyze or post air tasking orders (ATOs) or airspace control orders (ACOs) | 67 |
| A44 | Interpret ATOs or ACOs | 67 |
| A31 | Disseminate computer-generated data | 67 |
| B123 | Monitor execution of ATOs or ACOs | 50 |
| E207 | Load ATOs | 50 |
| A42 | Insert operational data into computers | 50 |
| A39 | Extract mission data from computer systems | 33 |
| K525 | Conduct OJT | 33 |
| L574 | Safeguard classified materials | 33 |
| B101 | Coordinate allocations of IFF/SIF codes with other agencies | 33 |
| L552 | Destroy classified materials | 33 |
| I426 | Perform site security | 33 |
| L548 | Annotate security forms for facilities or security containers | 33 |
| A70 | Perform secure communications procedures | 33 |
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 33 |
| A68 | Perform radio or telephone (RT) procedures | 17 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 17 |
| D168 | Control quality or quantity of data inputs or outputs | 17 |
| M590 | Pick up or deliver equipment, tools, parts, or supplies | 17 |
| H347 | Plan training tactics | 17 |
| J465 | Direct training functions | 17 |
| M578 | Develop equipment checklists | 17 |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 17 |
| A21 | Coordinate aircraft requests for information or actions with ground agencies | 17 |
| L561 | Inventory classified materials | 17 |

# TABLE A2

## REPRESENTATIVE TASKS PERFORMED BY AIR SURVEILLANCE CLUSTER

| TASKS | | PERCENT MEMBERS PERFORMING (N=377) |
|---|---|---|
| A16 | Conduct shift change positional briefings | 91 |
| A61 | Perform console or equipment setup or adjustment procedures | 91 |
| A68 | Perform radio or telephone (RT) procedures | 89 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 86 |
| A62 | Perform console or equipment shutdown procedures | 84 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 81 |
| A45 | Interpret radar returns or displays | 80 |
| A12 | Complete equipment performance checks | 80 |
| A11 | Change radio frequencies on communications panels | 78 |
| A37 | Evaluate track data | 77 |
| A85 | Update tracks | 77 |
| A38 | Expand, contract, or offset radar video displays | 77 |
| A70 | Perform secure communications procedures | 75 |
| A76 | Report equipment malfunctions or substandard performance to appropriate agencies | 75 |
| A84 | Update console displays | 73 |
| A82 | Switch console function modes | 72 |
| A18 | Configure console displays to depict operational information, such as coastlines, air bases, or training areas | 71 |
| A13 | Conduct emergency evacuation procedures | 71 |
| A1 | Accept assigned tracks | 68 |
| A59 | Perform authentication procedures | 68 |
| A57 | Monitor or evaluate display console activities | 66 |
| A58 | Monitor or evaluate equipment performance | 66 |
| A41 | Identify computer malfunctions | 65 |
| D160 | Analyze or identify jamming or interference | 64 |
| A66 | Perform lost track procedures | 63 |
| A2 | Accept simulated tracks | 63 |
| A56 | Monitor weather, tactical, or operational data | 61 |
| A53 | Monitor defense areas or zones | 60 |
| B125 | Perform emergency action procedures | 60 |
| E231 | Report unknown aircraft | 59 |
| A72 | Recognize and report electromagnetic interferences (EMIs) or electronic attacks | 59 |
| A48 | Load crypto variables | 58 |
| L552 | Destroy classified materials | 58 |
| E210 | Maintain track continuity | 58 |

A2

# TABLE A3

## REPRESENTATIVE TASKS PERFORMED BY IDENTIFICATION JOB

| TASKS | | PERCENT MEMBERS PERFORMING (N=65) |
|---|---|---|
| E203 | Identify aircraft using IFF/SIF procedures | 95 |
| E199 | Determine track classifications or identifications | 92 |
| E204 | Identify aircraft using methods other than IFF/SIF procedures | 91 |
| E196 | Correlate targets with known flight plans | 86 |
| E214 | Obtain identification information from other agencies | 85 |
| A68 | Perform radio or telephone (RT) procedures | 82 |
| E231 | Report unknown aircraft | 82 |
| A16 | Conduct shift change positional briefings | 77 |
| A70 | Perform secure communications procedures | 77 |
| A69 | Perform safe passage procedures | 75 |
| A59 | Perform authentication procedures | 75 |
| E206 | Interpret flight plan information | 74 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 71 |
| E197 | Detect targets and initiate track symbology on present position of data | 69 |
| A66 | Perform lost track procedures | 69 |
| A61 | Perform console or equipment setup or adjustment procedures | 69 |
| E218 | Perform drop or extrapolation procedures | 68 |
| A85 | Update tracks | 66 |
| A82 | Switch console function modes | 66 |
| E210 | Maintain track continuity | 63 |
| E217 | Perform correlation checks | 62 |
| A38 | Expand, contract, or offset radar video displays | 60 |
| A22 | Coordinate identification friend or foe (IFF)/selective identification feature (SIF) problems with Federal Aviation Administration (FAA) control centers or foreign agencies | 60 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 57 |
| A37 | Evaluate track data | 54 |
| A53 | Monitor defense areas or zones | 52 |
| B101 | Coordinate allocations of IFF/SIF codes with other agencies | 52 |
| E200 | Direct identification coordination or communication actions | 51 |
| E198 | Determine flight sizes | 51 |
| A84 | Update console displays | 49 |
| E208 | Maintain computerized flight plan data | 48 |
| A45 | Interpret radar returns or displays | 43 |
| L574 | Safeguard classified materials | 42 |
| E188 | Assign numbers and amplify data to tracks | 40 |

TABLE A4

REPRESENTATIVE TASKS PERFORMED BY DATA LINK CLUSTER

| TASKS | | PERCENT MEMBERS PERFORMING (N=82) |
|---|---|---|
| C154 | Maintain data links | 96 |
| C155 | Monitor data link displays | 95 |
| C150 | Establish data links | 95 |
| A16 | Conduct shift change positional briefings | 93 |
| C151 | Identify data link malfunctions during digital data link interface operations | 90 |
| A11 | Change radio frequencies on communications panels | 90 |
| A68 | Perform radio or telephone (RT) procedures | 88 |
| C141 | Build data link filters | 88 |
| C159 | Resolve data link conflicts | 85 |
| A61 | Perform console or equipment setup or adjustment procedures | 80 |
| C156 | Perform digital information link procedures | 79 |
| A70 | Perform secure communications procedures | 76 |
| A48 | Load crypto variables | 76 |
| A12 | Complete equipment performance checks | 76 |
| C144 | Coordinate data link filters with other agencies | 74 |
| A62 | Perform console or equipment shutdown procedures | 74 |
| C149 | Establish data link equipment operation parameters | 73 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 73 |
| A15 | Conduct radio checks with aircraft | 72 |
| A18 | Configure console displays to depict operational information, such as coastlines, air bases, or training areas | 67 |
| C145 | Coordinate operations tasking links with other agencies | 61 |
| A45 | Interpret radar returns or displays | 61 |
| A13 | Conduct emergency evacuation procedures | 61 |
| A85 | Update tracks | 59 |
| A52 | Monitor air-to-ground or air-to-air communications | 57 |
| A76 | Report equipment malfunctions or substandard performance to appropriate agencies | 57 |
| A36 | Establish radio contact with aircrews | 56 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 56 |
| A37 | Evaluate track data | 55 |
| C152 | Interpret operations tasking links | 55 |
| A59 | Perform authentication procedures | 54 |
| A41 | Identify computer malfunctions | 51 |
| A84 | Update console displays | 50 |
| A38 | Expand, contract, or offset radar video displays | 50 |
| A1 | Accept assigned tracks | 49 |

A4

# TABLE A5

## REPRESENTATIVE TASKS PERFORMED BY BATTLE MANAGEMENT CLUSTER

| TASKS | | PERCENT MEMBERS PERFORMING (N=55) |
|---|---|---|
| A16 | Conduct shift change positional briefings | 95 |
| A10 | Brief relieving crews on changes in policies, procedures, or operational status | 89 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 89 |
| A59 | Perform authentication procedures | 87 |
| A70 | Perform secure communications procedures | 82 |
| L552 | Destroy classified materials | 80 |
| A13 | Conduct emergency evacuation procedures | 76 |
| A24 | Coordinate search and rescue actions with other agencies | 71 |
| A68 | Perform radio or telephone (RT) procedures | 69 |
| L561 | Inventory classified materials | 69 |
| L574 | Safeguard classified materials | 67 |
| A48 | Load crypto variables | 67 |
| B125 | Perform emergency action procedures | 65 |
| B126 | Receive or record intelligence information | 64 |
| B133 | Report hijacked aircraft to higher authorities | 64 |
| A6 | Analyze mission information on schedules, status boards, or displays | 62 |
| A12 | Complete equipment performance checks | 60 |
| B104 | Coordinate emergency actions with command and control agencies | 60 |
| B97 | Conduct mission or exercise crew briefings or crew debriefings | 58 |
| A75 | Report authentication compromises | 58 |
| A11 | Change radio frequencies on communications panels | 56 |
| B118 | Inform higher echelons of operational conditions affecting mission accomplishment | 55 |
| A23 | Coordinate scramble actions with other agencies | 55 |
| B100 | Coordinate alerts or warnings with other positions or agencies | 55 |
| A54 | Monitor search and rescue operations | 55 |
| A52 | Monitor air-to-ground or air-to-air communications | 51 |
| A56 | Monitor weather, tactical, or operational data | 51 |
| A61 | Perform console or equipment setup or adjustment procedures | 51 |
| A4 | Analyze impacts of equipment malfunctions | 51 |
| B105 | Coordinate equipment downtimes with maintenance personnel | 49 |
| A18 | Configure console displays to depict operational information, such as coastlines, air bases, or training areas | 49 |
| A76 | Report equipment malfunctions or substandard performance to appropriate agencies | 49 |
| A62 | Perform console or equipment shutdown procedures | 49 |
| B134 | Report or disseminate intelligence information | 47 |

A5

# TABLE A6

## REPRESENTATIVE TASKS PERFORMED BY WEAPONS DIRECTOR CLUSTER

| TASKS | | PERCENT MEMBERS PERFORMING (N=195) |
|---|---|---|
| A68 | Perform radio or telephone (RT) procedures | 96 |
| A11 | Change radio frequencies on communications panels | 92 |
| A61 | Perform console or equipment setup or adjustment procedures | 91 |
| H309 | Determine aircraft positions during dissimilar or aerial combat tactics (DACT or ACT) exercises | 88 |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 88 |
| A25 | Coordinate or direct aircraft radio frequency changes with aircraft or ground agencies | 88 |
| A38 | Expand, contract, or offset radar video displays | 87 |
| H341 | Monitor flying safety | 87 |
| H304 | Coordinate aircraft recoveries with other agencies | 87 |
| A15 | Conduct radio checks with aircraft | 86 |
| H296 | Assist in conducting or conduct air refueling operations | 86 |
| A79 | Request weather information | 86 |
| A45 | Interpret radar returns or displays | 85 |
| A21 | Coordinate aircraft requests for information or actions with ground agencies | 85 |
| A52 | Monitor air-to-ground or air-to-air communications | 85 |
| H300 | Assist in conducting or conduct tactical intercepts | 85 |
| H335 | Hand off aircraft to other controlling agencies | 85 |
| H306 | Coordinate handoffs with other agencies | 84 |
| H342 | Monitor or update status of aircraft fuel, armament, or recovery base information | 83 |
| H290 | Accept control of aircraft from other control agencies | 83 |
| H308 | Deconflict aircraft with respect to routes, altitudes, or headings | 83 |
| A36 | Establish radio contact with aircrews | 82 |
| H344 | Perform aircraft-declared emergency procedures | 81 |
| H299 | Assist in conducting or conduct offensive or defensive missions | 79 |
| A16 | Conduct shift change positional briefings | 79 |
| A62 | Perform console or equipment shutdown procedures | 78 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 77 |
| A18 | Configure console displays to depict operational information, such as coastlines, air bases, or training areas | 77 |
| A6 | Analyze mission information on schedules, status boards, or displays | 76 |
| H351 | Relay aircraft status | 75 |
| A84 | Update console displays | 74 |
| A83 | Transmit weather information to aircraft | 74 |
| A74 | Report airspace violations | 74 |

# TABLE A7

## REPRESENTATIVE TASKS PERFORMED BY MOBILITY JOB

| TASKS | | PERCENT MEMBERS PERFORMING (N=5) |
|---|---|---|
| A68 | Perform radio or telephone (RT) procedures | 100 |
| L574 | Safeguard classified materials | 100 |
| A79 | Request weather information | 100 |
| A45 | Interpret radar returns or displays | 100 |
| I389 | Don or doff chemical warfare personal protective clothing | 100 |
| I380 | Coordinate specific source of personnel requirements with appropriate agencies | 80 |
| I417 | Participate in mobility exercise planning meetings | 80 |
| I379 | Coordinate mobility exercise or contingency requirements with appropriate agencies | 80 |
| J483 | Evaluate mobility, contingency, disaster preparedness, or unit emergency or alert plans | 80 |
| I406 | Maintain disaster preparedness checklists | 80 |
| I433 | Review OPLANs to determine unit or personnel responsibilities | 80 |
| I404 | Load or offload vehicles | 80 |
| I410 | Monitor mobility deployment kits | 80 |
| J447 | Conduct self-inspections or self-assessments | 80 |
| I428 | Prepare equipment for deployments | 80 |
| I384 | Develop personnel recall and accounting procedures | 80 |
| I374 | Conduct mobility or contingency procedure orientations or briefings | 80 |
| I385 | Develop workcenter pyramid recall plans | 80 |
| A81 | Study enemy tactics, formations, or aircraft and equipment capabilities | 80 |
| I398 | Identify equipment or personnel requirements for mobility exercises or deployments | 80 |
| A80 | Respond to alerts or warnings, such as defense conditions (DEFCONs) or weather alerts | 80 |
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 60 |
| H341 | Monitor flying safety | 60 |
| I377 | Coordinate deployment of personnel with other MAJCOMs or joint service commands | 60 |
| E203 | Identify aircraft using IFF/SIF procedures | 60 |
| L552 | Destroy classified materials | 60 |
| J499 | Maintain or update contingency plans, mobility plans, or base support plans | 60 |
| L561 | Inventory classified materials | 60 |
| I390 | Draft or write mobility exercise or deployment after-action reports | 60 |

# TABLE A8

## REPRESENTATIVE TASKS PERFORMED BY MANAGERIAL JOB

| TASKS | | PERCENT MEMBERS PERFORMING (N=78) |
|---|---|---|
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 97 |
| J513 | Supervise military personnel | 90 |
| J518 | Write recommendations for awards or decorations | 88 |
| J496 | Inspect personnel for compliance with military standards | 87 |
| J516 | Write performance reports or supervisory appraisals | 85 |
| J453 | Counsel subordinates concerning personal matters | 83 |
| J511 | Schedule work assignments or priorities | 82 |
| J457 | Determine or establish work assignments or priorities | 82 |
| J446 | Conduct general meetings, such as staff meetings, briefings, conferences, or workshops | 81 |
| J501 | Plan briefings, conferences, or workshops | 78 |
| J449 | Conduct supervisory performance feedback sessions | 78 |
| J485 | Evaluate personnel for promotion, demotion, reclassification, or special awards | 77 |
| J488 | Evaluate workload requirements | 77 |
| J464 | Direct administrative functions | 77 |
| J484 | Evaluate personnel for compliance with performance standards | 76 |
| J451 | Conduct supervisory orientations for newly assigned personnel | 76 |
| J463 | Develop or establish work schedules | 76 |
| J487 | Evaluate work schedules | 74 |
| J509 | Schedule personnel for temporary duty (TDY) assignments, leaves, or passes | 74 |
| J474 | Establish performance standards for subordinates | 74 |
| J515 | Write job or position descriptions | 74 |
| J497 | Interpret policies, directives, or procedures for subordinates | 73 |
| J443 | Assign personnel to work areas or duty positions | 72 |
| J462 | Develop or establish work methods or procedures | 72 |
| J495 | Initiate actions required due to substandard performance of personnel | 72 |
| J447 | Conduct self-inspections or self-assessments | 69 |
| J480 | Evaluate job or position descriptions | 68 |
| J481 | Evaluate job-related suggestions | 67 |
| J465 | Direct training functions | 67 |
| L574 | Safeguard classified materials | 64 |
| J508 | Review drafts of policy directives, instructions, or manuals | 63 |
| J467 | Draft agenda for general meetings, such as staff meetings, briefings, conferences, or workshops | 63 |
| J492 | Indorse performance reports or supervisory appraisals | 62 |
| J517 | Write staff studies, surveys, or routine reports, other than training or inspection reports | 45 |

A8

# TABLE A9

## REPRESENTATIVE TASKS PERFORMED BY ACTION OFFICER JOB

| TASKS | | PERCENT MEMBERS PERFORMING (N=6) |
|---|---|---|
| J500 | Participate in general meetings, such as staff meetings, briefings, conferences, or workshops, other than conducting | 100 |
| L549 | Compile data for records, reports, logs, or trend analyses | 100 |
| J517 | Write staff studies, surveys, or routine reports, other than training or inspection reports | 100 |
| J501 | Plan briefings, conferences, or workshops | 100 |
| L551 | Coordinate requests for TDY orders with appropriate agencies | 100 |
| L548 | Annotate security forms for facilities or security containers | 100 |
| L556 | Initiate classified reports, messages, or documents | 100 |
| L575 | Write minutes of briefings, conferences, or meetings | 83 |
| L560 | Initiate requests for TDY orders | 83 |
| J467 | Draft agenda for general meetings, such as staff meetings, briefings, conferences, or workshops | 83 |
| L574 | Safeguard classified materials | 67 |
| L571 | Prepare administrative or classified materials for mailing, transporting, or issue | 67 |
| G267 | Analyze radar data to determine trends | 67 |
| L552 | Destroy classified materials | 67 |
| J446 | Conduct general meetings, such as staff meetings, briefings, conferences, or workshops | 67 |
| L555 | Identify and report suspected security compromises | 67 |
| J471 | Establish administrative files, such as correspondence files or classified files | 67 |
| A58 | Monitor or evaluate equipment performance | 50 |
| J508 | Review drafts of policy directives, instructions, or manuals | 50 |
| M589 | Maintain organizational equipment or supply records, such as custodian authorization/custody receipt listings (CA/CRLs) | 50 |
| J462 | Develop or establish work methods or procedures | 50 |
| J473 | Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs) | 50 |
| M581 | Initiate documentation to turn in excess or surplus property | 50 |
| L561 | Inventory classified materials | 50 |
| A37 | Evaluate track data | 50 |
| M585 | Issue or log turn-ins of equipment, tools, parts, or supplies | 33 |
| M583 | Initiate requisitions for equipment, tools, parts, or supplies | 33 |

TABLE A10

REPRESENTATIVE TASKS PERFORMED BY RADAR EVALUATION JOB

| TASKS | | PERCENT MEMBERS PERFORMING (N=12) |
|---|---|---|
| G277 | Interpret effects of weather on radar | 100 |
| G267 | Analyze radar data to determine trends | 92 |
| E202 | Evaluate radar coverage | 92 |
| G271 | Conduct periodic radar evaluation programs (PREPs) | 92 |
| G272 | Determine standard deviations from acceptable search, beacon, and height tolerances | 92 |
| G284 | Perform or assess data reductions | 83 |
| A37 | Evaluate track data | 83 |
| G282 | Perform mathematical computations to determine radar performances or characteristics | 83 |
| G289 | Upload evaluation data into computers | 83 |
| A45 | Interpret radar returns or displays | 83 |
| D181 | Monitor radar evaluation flights | 75 |
| G274 | Develop and justify radar evaluation computerized products | 75 |
| D183 | Perform height accuracy checks | 75 |
| G281 | Perform integration or adaptation checks between site or user locations | 75 |
| G279 | Monitor evaluation flight patterns to interpret adverse environmental effects on aircraft cross-sections | 75 |
| A58 | Monitor or evaluate equipment performance | 75 |
| G280 | Organize evaluation tracks into specific categories or groups | 67 |
| G287 | Recommend or plot evaluation flight routes | 67 |
| D182 | Obtain height correction factors from weather agencies | 67 |
| G278 | Investigate system degradations | 67 |
| G268 | Brief operations personnel or pilots on evaluation flight parameters | 67 |
| G269 | Collect weather data for determining D-values and height refraction indexes | 67 |
| K528 | Determine training requirements | 67 |
| E229 | Record tracks | 58 |
| A57 | Monitor or evaluate display console activities | 58 |
| G288 | Score radar evaluation flights | 58 |
| G270 | Compile measurements of radar display presentations | 58 |
| L549 | Compile data for records, reports, logs, or trend analyses | 58 |
| K525 | Conduct OJT | 58 |
| J474 | Establish performance standards for subordinates | 58 |
| K538 | Evaluate progress of trainees | 58 |
| G276 | Identify unique radar characteristics for optimum performance | 50 |
| A31 | Disseminate computer-generated data | 50 |

# TABLE A11

## REPRESENTATIVE TASKS PERFORMED BY TRAINING JOB

| TASKS | | PERCENT MEMBERS PERFORMING (N=11) |
|---|---|---|
| K532 | Develop training programs, plans, or procedures | 100 |
| K531 | Develop training materials or aids | 100 |
| K534 | Evaluate personnel to determine training needs | 100 |
| K538 | Evaluate progress of trainees | 100 |
| K533 | Establish or maintain study reference files | 100 |
| K535 | Evaluate training methods or techniques of instructors | 100 |
| K539 | Inspect training materials or aids for operation or suitability | 100 |
| K528 | Determine training requirements | 100 |
| K537 | Evaluate effectiveness of training programs, plans, or procedures | 100 |
| K540 | Maintain training records or files | 91 |
| K530 | Develop performance tests | 91 |
| K527 | Counsel trainees on training progress | 91 |
| K546 | Write test questions | 91 |
| K529 | Develop formal course curricula, plans of instruction (POI), or specialty training standards (STSs) | 91 |
| K536 | Evaluate training requirements for instructors | 91 |
| K520 | Administer or score tests | 91 |
| K541 | Personalize lesson plans | 82 |
| K525 | Conduct OJT | 82 |
| K524 | Conduct formal course classroom training | 73 |
| K526 | Conduct training conferences, briefings, or debriefings | 73 |
| K545 | Schedule training | 73 |
| K522 | Brief organizational personnel concerning training programs or matters | 73 |
| K547 | Write training reports | 64 |
| K544 | Procure training aids, space, or equipment | 64 |
| J513 | Supervise military personnel | 55 |
| K523 | Complete student entry or withdrawal forms | 55 |
| K521 | Assign formal course instructors or on-the-job training (OJT) trainers or certifiers | 55 |
| A41 | Identify computer malfunctions | 55 |
| A61 | Perform console or equipment setup or adjustment procedures | 55 |
| A12 | Complete equipment performance checks | 45 |
| J465 | Direct training functions | 36 |
| K542 | Prepare command standard training packages | 36 |

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